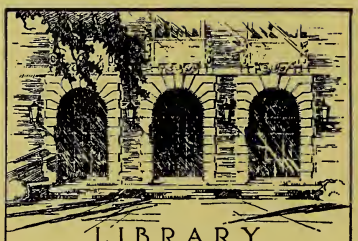

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CATALOG OF THE NORTH ADAMS NORMAL SCHOOL

1900-1901

STATE NORMAL SCHOOL

AT

NORTH ADAMS, MASS.

Established June, 1894.

CATALOG AND CIRCULAR

FOR 1900.

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Established 1837.

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LILIAN S. DANIELS, *Assistant.*

* Instructors in the training school also.

CALENDAR.

1900.

Graduation.
Tuesday, June 26.

First Entrance Examination.
Thursday and Friday, June 28 and 29, at 9 A.M.

Second Entrance Examination.
Tuesday and Wednesday, September 11 and 12, at 9 A.M.

School Year Begins
Thursday, September 13, at 9 A.M.

Thanksgiving Recess.
Begins Tuesday night, November 27. Ends Monday night, December 3.

Christmas Recess.
Begins Thursday night, December 20. Ends Monday night, Dec. 31.

1901.

Second Term Begins
Monday, February 4.

Spring Recess.
Begins Friday night, March 29. Ends Monday night, April 8.

Graduation.
Tuesday, June 25.

First Entrance Examination.
Thursday and Friday, June 27 and 28, at 9 A.M.

Second Entrance Examination.
Tuesday and Wednesday, September 10 and 11, at 9 A.M.

Thanksgiving Recess.
Begins Tuesday night, November 26. Ends Monday night, December 2.

Christmas Recess.
Begins Thursday night, December 19. Ends Monday night, December 30.

Sessions are from 9 A.M. to 12 M , and 1.30 P.M. to 4 P.M. Saturday sessions are omitted.

Entrance examinations on the dates given above begin at 9 o'clock A.M., in the assembly hall. Candidates are to be present at the opening and on both days. They should come prepared to stay in September, as the term begins on the following day.

For information about the school address the principal at North Adams.

State Normal School

AT NORTH ADAMS, MASS.

HISTORICAL.

By an act of Legislature approved June 6, 1894, four new normal schools were established. Of these, the school at North Adams was one. The first class was received Feb. 1, 1897.

LOCATION.

North Adams is distinctively picturesque. The elevations that surround the city are among the most attractive of the Berkshire hills. On the north side are rounded domes of the Green Mountains, on the east the abrupt wall of Hoosac Mountain overhangs the city, while on the south-west border rise the outlines of massive Greylock, the highest peak in Massachusetts.

On the westerly slope of an eminence rising several hundred feet above the river are situated the school buildings. Of the many beautiful locations in Berkshire county, the one chosen is remarkably fine. The near rounded domes, the deep retreating valleys, the winding streams, with all their changing life and aspects, always please and inspire. The noisy hum of the city slightly removed, the beauties of nature close at hand, the duties of student life are made easy and profitable to an unusual degree. The city of North Adams was both wise and generous in its gift of a location. Especially noteworthy are the facilities for out-door study of nature and of industry.

The city is easily reached from the east and west by the Fitchburg Railroad, from the south by the Boston & Albany road. Electric cars connect the city with Adams and Williamstown.

BUILDINGS.

The buildings in exterior are of yellow brick and white marble, with metal roofs. The school building, in Italian style, is one hundred and fifty-two feet long, eighty-four feet deep, and three stories and basement in height. It is of slow-burning construction, the floor timbering and roof being carried with steel beams and trusses. The arrangement of stairways, which are iron, gives easy and safe egress.

In the basement are the boiler, engine, fuel, heating and janitor's rooms, a lunch room, gymnasium and bath rooms, a room for manual training and a photographic dark room; in the first story, two reception rooms, cloak, coat and toilet rooms, and four natural science laboratories; in the second story, the assembly hall, office, libraries, and class rooms for the languages and mathematics; in the third story, the physical and chemical laboratories, the art rooms, and a general class room; and in the attic is ample space for storage.

The interior is finished in oak throughout and provided with modern improvements and facilities. Cabinets, drawers, closets, specially adapted to the needs of the school, are provided in all the rooms. In strength, simplicity, beauty and adaptation to its use the school building is not surpassed.

REQUIREMENTS FOR ADMISSION.

Candidates for admission to any one of the normal schools must have attained the age of seventeen years complete, if young men, and sixteen years, if young women.

1. They must be free from any disease or infirmity which would unfit them for the office of teacher.

2. They must present certificates of good moral standing.

3. They must give evidence of good intellectual capacity (records of their scholarship standing in the high schools are desired).

4. They must be graduates of high schools whose courses of study have been approved by the Board of Education,

5. Or they must have received, to the satisfaction of the principal and the Board of Visitors of the school, the equivalent of a good high school education.

6. Candidates must also declare their intention to complete the course of study in the school, if possible, and afterwards to teach in the public schools of Massachusetts.

It may be said, in general, that, if the ordinary work of a good statutory high school, as defined by section 2, chapter 496 of the Acts of 1898, is well done, a student should be able to meet the requirements of these examinations.

The importance of a *good record in the high school* cannot be over-estimated. The stronger the evidence of character, scholarship and promise, of whatever kind, candidates bring, especially from schools of high reputation and from teachers of good judgment and fearless expression, the greater confidence they may have in guarding themselves against the contingencies of an examination and of satisfying the examiners with their fitness.

Reasonable allowance in *equivalents* will be made in case a candidate, for satisfactory reasons, has not taken a study named for examination. Successful experience in teaching is allowed to be taken into account in the determination of equivalents.

ORAL EXAMINATIONS.

Candidates will be questioned orally either upon some of the foregoing subjects or upon matters of common interest to them and the school, at the discretion of the examiners. In this interview the object is to gain some impression about the candidates' personal characteristics and their use of language, as well as to give them an opportunity to furnish any evidences of qualification that might not otherwise become

known to their examiners. Any work of a personal, genuine and legitimate character that candidates have done in connection with any of the groups that are set for examination, and that is susceptible of visible or tangible presentation, may be offered at this time, and such work will be duly weighed in the final estimate, and may even determine it. To indicate the scope of this feature, the following kinds of possible presentation are suggested, but the candidates may readily extend the list: —

1. A book of drawing exercises, — practically such a book of exercises as one might prepare in following the directions in "An Outline of Lessons in Drawing for Ungraded Schools," prepared under the direction of the Massachusetts Board of Education, or in developing any branch of that scheme.

2. Any laboratory note-book that is a genuine record of experiments performed, data gathered or work done, with the usual accompaniments of diagrams, observations and conclusions.

3. Any essay or article that presents the nature, successive steps and conclusion of any simple, personally conducted investigation of a scientific character, with such diagrams, sketches, tables and other helps as the character of the work may suggest.

4. Any exercise book containing compositions, abstracts, analyses or other written work that involves study in connection with the literature requirements of the examination.

WRITTEN EXAMINATIONS.

The written examination will embrace one paper upon each of the following groups, with a maximum time allowance of two hours for each of groups I., II. and IV., and of one hour for each of groups III. and V.: —

I. *Languages.* — (*a*) English, with its grammar and literature, and (*b*) one of the three languages, — Latin, French and German.

II. *Mathematics.* — (*a*) Arithmetic, (*b*) the elements of algebra and (*c*) the elements of plane geometry.

III. *History and Geography.* — The history and civil government of Massachusetts and the United States, with related geography and so much of English history as is directly contributory to a knowledge of United States history.

IV. *Sciences.* — (*a*) Physical geography, (*b*) physiology and hygiene, (*c*) physics, (*d*) botany and (*e*) chemistry.

V. *Drawing and Music.* — (*a*) Elementary, mechanical and freehand drawing, with any one of the topics, — form, color and arrangement, and (*b*) musical notation.

SPECIAL DIRECTIONS.

No candidate will be accepted whose written English is notably deficient in clear and accurate expression, spelling, punctuation, idiom or division of paragraphs, or whose spoken English exhibits faults so serious as to make it inexpedient for the normal school to attempt their correction. The candidate's English, therefore, in all oral and written examinations will be subject to the requirements implied in the foregoing statement, and marked accordingly.

Languages.

(*a*) *English.* — The importance of a good foundation in English cannot be overrated. The plan and the subjects for the examination will be the same as those generally agreed upon by the colleges and high technical schools of New England. While candidates are strongly advised to study, either in school or out, *all* the works given in this plan, the topics and questions will be so prepared for 1900, and thereafter until further announcement, that any candidate may expect to meet them who has mastered *half* of the works assigned for reading (or a bare majority of them) and *half* of the works assigned for study and practice, the

selection to be at the candidate's option or that of the school which he attends.

1. *Reading and Practice.* — A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of several topics to be chosen by the candidate from a considerable number — perhaps ten or fifteen — set before him in the examination paper. The treatment of these topics is designated to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. In place of a part or the whole of this test, the candidate may present an exercise book properly certified by his instructor, containing compositions or other written work done in connection with the reading of the books. In preparation for this part of the requirement, it is important that the candidate shall have been instructed in the fundamental principles of rhetoric.

The books set for this part of the examination will be: —

1900. — Dryden's *Palamon and Arcite;* Pope's *Iliad*, Books I., VI., XXII. and XXIV.; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* DeQuincey's *The Flight of a Tartar Tribe;* Cooper's *The Last of the Mohicans;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal.*

1901, 1902. — Shakespeare's *The Merchant of Venice;* Pope's *Iliad*, Books I., VI., XXII. and XXIV.; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

1903–1905. — Shakespeare's *The Merchant of Venice* and *Julius Cæsar; The Sir Roger de Coverley Papers*

in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

2. *Study and Practice.* — This part of the examination presupposes a more careful study of each of the works named below. The examination will be upon subject-matter, form and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy. In addition the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong.

The books set for this part of the examination will be: —

1900. — Shakespeare's *Macbeth;* Milton's *Paradise Lost,* Books I. and II.; Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

1901, 1902. — Shakespeare's *Macbeth;* Milton's *Lycidas, Comus, L'Allegro,* and *Il Penseroso;* Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

1903–1905. — Shakespeare's *Macbeth;* Milton's *Lycidas, Comus, L'Allegro,* and *Il Penseroso;* Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

(*b*) One only of the three languages, — *Latin, French* and *German.* The translation at sight of simple prose, with questions on the usual forms and ordinary constructions of the language. The candidate is earnestly advised to study *Latin* and either *French* or *German.*

II. Mathematics.

(*a*) *Arithmetic.* — Such an acquaintance with the subject as may be gained in a good grammar school.

(*b*) *Algebra.* — The mastery of any text book suitable for the youngest class in a high school, through cases of affected quadratic equations involving one unknown quantity.

(*c*) *Geometry.* — The elements of plane geometry as presented in any high school text book. While a fair acquaintance with ordinary book work in geometry will, for the present, be accepted, candidates are advised, so far as practicable, to do original work with both theorems and problems, and an opportunity will be offered them, by means of alternative questions, to test their ability in such work.

III. History and Geography.

Any school text-book on United States history will enable candidates to meet this requirement, provided they study enough of geography to illumine the history, and make themselves familiar with the grander features of government in Massachusetts and the United States. Collateral reading in United States history is strongly advised.

IV. Sciences.

(*a*) *Physical Geography.* — The mastery of the elements of this subject as presented in the study of geography in a good grammar school. If the grammar school work is supplemented by the study of some elementary text-book on physical geography, better preparation still is assured.

(*b*) *Physiology and Hygiene.* — The chief elementary facts of anatomy, the general functions of the various organs, the more obvious rules of health, and the more striking effects of alcoholic drinks, narcotics and stimulants upon those addicted to their use.

(*c*), (*d*) *and* (*e*) *Physics, Chemistry and Botany.* — The elementary principles of these subjects, so far as they may be presented in the courses usually devoted to them in good high schools. Study of the foregoing sciences, or of some of them, with the aid of laboratory methods, is earnestly recommended.

V. Drawing and Music.

(*a*) *Drawing.* — Mechanical and freehand drawing, — enough to enable the candidates to draw a simple object, like a box or a pyramid or a cylinder, with plan and elevation to scale, and to make a freehand sketch of the same in perspective. Also any one of the three topics, — form, color and arrangement.

(*b*) *Music.* — The elementary principles of musical notation, such as an instructor should know in teaching singing in the schools. Ability to sing, while not required, will be prized as an additional qualification.

TIMES OF EXAMINATION AND ADMISSION.

Examinations for admission to the normal schools are held at the close of the school year in June, and also at the beginning of the school year in September. Candidates are advised to present themselves at the first examination.

New classes are admitted to the normal schools at the beginning of the fall term. Candidates should come in September prepared to stay, as regular work begins on the day following the examinations.

PRELIMINARY EXAMINATION.

1. Candidates may be admitted to a preliminary examination a year in advance of their final examination, provided they offer themselves in one or more of the following groups, each group to be presented in full: —

II. Mathematics.
III. History and Geography.
IV. Sciences.
V. Drawing and Music.

See pages 10–15.

Preliminary examinations can be taken in June only.

Every candidate for a preliminary examination must present a certificate of preparation in the group or groups

chosen, or in the subjects thereof, the form of certificate to be substantially as follows: —

_____ has been a pupil in the _____ School for _____ years and is, in my judgment, prepared to pass the normal school preliminary examination in the following group, or groups, of subjects and the divisions thereof:

_____

_____

Signature of principal or teacher, _____

Address, _____

2. The group known as "*I. Languages*" must be reserved for the final examinations. It will doubtless be found generally advisable in practice that the group known as "*IV. Sciences*" should also be so reserved.

Candidates for the final or complete examinations are earnestly advised to present themselves, so far as practicable, in June. Division of the final or complete examinations between June and September is permissible, but it is important both for the normal school and for the candidate that the work laid out for the September examinations, which so closely precede the opening of the school, shall be kept down to a minimum.

EXPENSES.

Tuition is free to all residents of Massachusetts who declare their intention to teach in the public schools of the State. Each pupil from another State than Massachusetts attending a normal school supported by this State, from and after the beginning of the autumn session of 1901, shall pay to the principal of the school attended at the beginning of each half-year session, the sum of twenty-five dollars for the use of the school.

Text-books and supplies are free, as in the public schools.

State aid, not exceeding one dollar and one-half per week, may be granted to deserving persons after they have been in attendance for at least one term, provided they are residents of Massachusetts, and do not live in towns where the normal schools are situated.

COURSES.

The Two Years' Course.

This course is designed primarily for those who aim to teach in public schools below the high school grade. It comprises substantially the following subjects: —

1. Psychology, history of education, principles of education, methods of instruction and discipline, school organization and the school laws of Massachusetts.

2. Methods of teaching the following subjects: —

(*a*) English, — reading, language, rhetoric, composition, literature and history.

(*b*) Mathematics, — arithmetic, book-keeping, elementary algebra and geometry.

(*c*) Science, — elementary physics and chemistry, geography, physiology and hygiene, and the study of minerals, plants and animals.

(*d*) Drawing, vocal music, physical culture and manual training.

3. Observation and practice in the training school and observation in other public schools.

The Three Years' Course.

Some portion of a third year is necessary in order to afford sufficient practice in teaching to those students who have not had experience in teaching and who are planning to teach in grades not requiring Latin. It is a necessity that all students spend a third year in the study of elective subjects and in the practice of teaching in order to take the more prominent and responsible positions in the elementary schools or to enter upon departmental teaching.

For students signifying at their admission their intention

of pursuing a three years' course, it will be arranged so that elective subjects may be begun early in the course, instead of being postponed to the third year.

The Kindergarten Course.

The kindergarten course requires one year of study and training in the two years' course, including those studies which are essential to kindergarten work, and one year of practical work with the children and in the theory and history of the kindergarten. Students well prepared to enter upon this course may complete it in two years, but a longer time is needed in most cases to make one competent to be principal of a kindergarten. It is very desirable that the student should have the full two years' course and one year added for the special kindergarten training. Students pay the cost of material taken away for future use, but this expense does not exceed ten dollars for the course.

The conditions of admission to this course are the same as for the regular two years' course. In addition, there should be some facility in playing the piano and singing, if the better positions are to be secured.

Special Courses for Teachers.

Teachers of several years of successful experience in teaching, who give evidence of maturity, good scholarship and of aptness to teach, may, with the consent of the principal and of the Board of Visitors, select a course (including the course in psychology and pedagogy), and when such course is successfully completed they shall receive certificates for the same. Candidates are admitted to this course without written examination.

Special Course for College Graduates.

Graduates of colleges and universities, and of high schools of a high grade and standing, who give evidence of maturity, good scholarship and of aptness to teach, may, with the consent of the principal of the school and of the Board of Visitors, select from the above curriculum of study a course

which may be completed in one year, and when such course is successfully completed they shall receive a certificate for the same. Candidates are admitted to this course without written examination.

EQUIPMENT.

The four natural science laboratories are arranged in sequence, and by means of specimens and models in well-lighted wall cases is displayed the progression of mineral, plant and animal life to its final development in man. Banks of drawers are provided in the laboratories for collections of the varieties of each type displayed in the wall cases. At the tables are drawers for the working collections and tools distributed to students. In the instructors' laboratories are reserve specimens, models, pictures, charts and diagrams.

Worthy of special mention are the following materials for study: —

The synoptic and Howell's college collection of minerals and rocks in the mineralogical and geological laboratory.

In the biological laboratories are the Deyrolle plant models, illustrating twelve of the leading families; the synoptical collection of invertebrates and vertebrates; the preparations (wet and dry) showing the habits, homes and metamorphoses of many insects, the development of a snail, a leech, a crayfish, a horse-shoe crab, a spider, a fish, a salamander, a frog, a toad, a snake and a lizard, displaying all stages of growth, from the egg to the adult form; dissected specimens of a clam, a crayfish, a lobster, a fish, a frog, a lizard, a turtle, a dove and a rat, displaying separately the digestive, circulatory and nervous systems; aquaria and cages; a series of skeletons, a human skeleton, a life-size manikin, a set of Auzoux models (eye, ear, larynx, brain, pelvis), and preserved vital organs.

In the geographical laboratories are several thousand carefully selected, mounted and classified pictures, including photographs, engravings, halftones, bromide enlargements, the Hölzel series of oleographs and several hundred lantern

slides. The models include the Jones eighteen-inch relief globe, Howell's (sixteen feet radius) model of the United States, and large model of southern New England, the Harvard series of physiographic models. Slated spheres, large and small globes are provided for class and individual use. Three sand-tables, each ten feet by four feet, afford abundant opportunities for sand modelling.

The collection of maps includes two maps of Switzerland, one beautifully shaded to show reliefs and drainage, and the other to show the same physical features combined with political and industrial features; two similar maps of Alpenland; Habenicht-Sydow physical series; Johnston political series; a series of thirty world maps, showing physical, productive, and political features; coast survey charts; topographic maps and folios; a series of maps of Massachusetts, showing relief, drainage, cities, railways, counties, etc.; similar maps of Rhode Island and New Hampshire; a series of maps for study of map symbols; pamphlets, railway folders, magazines, etc., for commercial geography.

The mathematical department is supplied with collections of models for individual use and class observation in the study of geometry, arithmetic and algebra, in their appropriate development through all grades, including those of the high school.

The historical and literary departments are supplied with several hundred classified pictures and numerous charts.

The art departments are equipped with adjustable tables, models, type and ornamental forms, pictures, drawings and casts, illustrative of all the phases of modern art teaching.

The library has been selected with especial reference to the needs of teachers. Department libraries are proportionately represented, and furnish excellent opportunities for general reference work and special investigation. Magazines and pamphlets for general culture and departmental study are numerous, the pamphlet division already including several thousand copies.

The three laboratories for physics and chemistry are equipped with modern improvements, and with apparatus for individual experimentation in both qualitative and quantitative work.

The manual training room is furnished with twenty-five sloyd benches and tools for working in clay and wood.

The gymnasium is equipped with the apparatus for the practice of Swedish gymnastics.

An electric projection lantern and numerous slides have been provided. The lantern can be used in six different rooms, and supplements the work in the various sciences, in literature and in art.

DESIGN OF THE NORMAL SCHOOL.

"The design of the normal school is strictly professional; that is, to prepare in the best possible manner the pupils for the work of organizing, governing and teaching the public schools of the Commonwealth" (Board of Education, May 6, 1880).

The work of each department is to secure these ends: —

Pupils. — The leading motive and continuous effort are to change the pupil's point of view from that of the student to that of the teacher, to inspire him with the spirit of the true teacher, to train him to the noblest ideals and best habits of personality, thinking and teaching.

Children. — The pupil is placed from the beginning of his course in close contact with children, that through them there may be revealed to him such understanding of child-life in general and appreciation of the individual children as will impress upon his mind the necessity of their interests being his chief concern. That schools should be organized to satisfy the needs of children, that school management is the process of securing self-control by the children, that children should be taught, rather than subjects, are truths which are presented as of fundamental importance.

Subjects. — The thought of the pupil is carefully directed to the subjects of a public school course. Each subject is

analyzed to find its content, its natural or logical order, its teaching order. The appropriate sources of knowledge are found, the prominent processes of acquisition are emphasized, and corresponding forms of expression exemplified. The knowledge, disciplinary, and cultural values of each subject are discussed. Stress is laid upon accuracy of knowledge and the use of each subject as a *means* and not an end in education. Natural and helpful correlations of subjects are made, and the place of each in a course of study indicated.

Teaching. — The process of learning is distinguished from the process of teaching, the pupil being led to perceive most definitely that in learning the student concentrates his thought upon the object, that in teaching the teacher concentrates his thought upon the student's mental process of learning. Pupils are led to discover by personal observation that the teaching process consists of two parts, namely, preparatory thought (*i.e.*, lesson planning) and consequent instruction (*i.e.*, teaching). Lesson plans are derived by the pupils from observed teaching and the study of typical plans, and are found to include consideration of (1) aims, that is, needs of the children to be satisfied; (2) right mental activity of the child; (3) appropriate sources of knowledge and interest. Lesson teaching is perceived to be (1) skilful use of sources of knowledge and interest, (2) which use stimulates right activity in each child, (3) and enables him to satisfy his needs. Pupils, by practice in writing lesson plans and in teaching children in accordance with the plans, become certain that intimate knowledge of children and thorough lesson planning are, together with the personality of the teacher, the vital conditions for successful teaching; that lesson plans may free the teacher of the burden of the subject, and enable him to attend discreetly and heartily to the needs and interests of the children. Similarly the place and purpose of recitations, drills, examinations and criticism are brought before the pupils for consideration and judgment.

Organization. — The principles underlying the organization of a school are arrived at by the pupils by direct study

of the training school and other schools they have experienced, by consideration of children's needs as individuals and as members of society, and by use of the experience of teachers and other educational authorities.

Government. — Pupils are led, by review of their own experiences in conforming, obeying, and controlling, by the testimony of others, by their knowledge of children, by their efforts in the training school, and by their study of psychology, to understand the relations between knowing, feeling, and doing, to value and use the instinctive reactions, and to attempt to form habits in themselves and children of right self-activity for the sake of self-development and service to others.

The school laws of the State receive due and appropriate study, in connection with the consideration of organization, government and the history of education.

Order of Studies in the Two Years' Course.

Junior Class.		Senior Class.	
First Term.	Second Term.	Third Term.	Fourth Term.
Drawing.	Drawing.	Drawing.	-
Music.	-	Reading.	Reading.
Manual training.	Gymnastics.	Gymnastics.	Gymnastics.
Language.	Grammar.	Literature.	Literature.
Chemistry.	Physics.	Geography.	Geography (half term).
Mineralogy.	Botany.	Zoology.	History of education and school laws (half term).
Physiology.	-	History.	
Geometry.	Algebra.	-	Psychology and pedagogy.
Penmanship.	Arithmetic.	-	-
Child study: — Individuals. Groups.	Observation of teaching and control. Assisting.	School organization. Teaching at training school.	School management. Teaching and control.
Kindergarten course omits manual training, chemistry and part of geometry.	Kindergarten course omits algebra and part of the arithmetic.	Kindergarten course omits drawing and history.	Kindergarten course omits geography.

THE RANGE OF THE SUBJECTS.

The professional work is indicated in general on pages 21–23, under the topic "Design of the School," but applies in detail to each of the subjects analyzed and described as follows. Accuracy and fulness of scholarship are strenuously emphasized.

Psychology and Pedagogy.

The study of children is continuous through the two years' course. Individual children are carefully observed to ascertain individual physical, mental, and moral aptitudes and defects, in order that each child's needs may be satisfied. Groups of children, — the healthy and the sick, the able and the weak, the bright and the dull, the tidy and the slovenly, the leaders and the followers, the good and the bad, etc., are found, and their relative numbers and importance estimated, that justice may be done to all. Based on these and similar observations made elsewhere are the pupils' conclusions as to native reactions, behavior, self-control, and tact.

In their study of the individual subjects of the course, pupils are taught to recognize the elementary processes of acquisition, the emotions aroused, the importance of interest, and the volitions resulting. The sources of knowledge, the stimuli of interest, the mental processes appropriate to the several subjects, and, in general, the conditions for right mental activity in each subject, are learned as individual facts.

In the observation and practice of teaching, effects of the teacher's knowledge of children, of subject, of fitness of mental process, of the influence of tact, of the possession of right habits, are discerned.

During the last term of the course, perception, memory, imagination, generalization, judgment, reasoning, the emotions, and the will are studied in sequence and detail. Facts of the student's consciousness, observations of others' minds, and books are the sources of knowledge. The

pupils thus come to an understanding of the elementary processes and their interdependence, of the importance of interest, of the conditions for best activity, and of the formation of habits. Principles of psychology and pedagogy are apprehended and appreciated because of their guidance of thought processes, their productiveness of interest and certainty, their determination of method. The study of psychology and pedagogy is, throughout, for the illumination and inspiration of teaching.

School Organization and Management.

These subjects are studied in a manner very like that described above. Observation and induction are the major portion of the process. The training school serves as the model of a school for children, the normal school as one for youth.

History of Education.

The aims in this course are: —

1. To discover the progress of educational theory and practice.
2. To discuss the aims, method and result of each.
3. To discuss the meaning and value of principles of education as evolved.
4. To find one's need of gaining inspiration from others.
5. To stimulate the desire to know the practice of other individuals and nations.
6. To liberalize, — foster the creative rather than the imitative spirit.

In the conduct of this course each pupil is provided with a brief compendium of the history of education as a foundation for his work; and a departmental pedagogical library is provided for reference use. Each pupil outlines the assigned topic for oral or written recitation, and free criticism follows. Frequent assignments of special subjects for investigation and report are made. Whenever feasible, educational theories and practices are illustrated in the conduct of the regular recitation.

School Laws of Massachusetts.

The purpose of this course is to make the students familiar with the principal powers, duties, and relations of teachers, pupils, and other parties directly concerned in school work as defined in the Public Statutes. To this end, brief consideration is given to law, — its relation to custom, as subsequent rather than precedent; its purpose, in defining and unifying practice; its kinds, — permissive, compulsory, and prohibitory. The more important laws are then analyzed; and the several powers and duties granted and forbidden to each of the parties finally summed up and classified.

Nature Study and Natural Science.

In the work in the natural sciences there is sought constantly the knowledge, the interest, the training needed by those who are to teach nature study and related subjects in elementary schools. Hence the aim is to cause the prospective teacher to possess and to be able to cultivate in others "what may be termed the elementary equivalent of the genuine scientific spirit, so that out of his native fondness for things about him shall come an enthusiastic truth-seeking, reverent attitude toward nature," an appreciation of the beauty, harmony and inviolability of nature's laws; together with some mastery of the means for subduing nature's forces and utilizing them for his own protection and development and for the social good.

Mineralogy. — Each student is assigned a place in the laboratory, and is provided with apparatus and type specimens (see Equipment, page 19).

He is taught to recognize and name a considerable number of minerals by practice in distinguishing their physical properties. A smaller number of the most common and useful minerals, with their varieties and the rocks in which they occur are studied in greater detail. Special stress is laid upon such as can be found in the neighborhood of the

school, and upon the uses of mineral bodies for manufacturing, building, and decorative purposes.

Students are led to see the value of such work in developing the power and the habit of close observation, critical comparison and nice discrimination; also in cultivating interest in common things, and utilizing the collecting instinct of children for their education.

A few chemical tests are taught, and other interesting correlations made with the study of chemistry going on at the same time.

Each student is assigned a topic for special research, the results of which are presented to the class. This gives training in the use of books and in the orderly arrangement of subject matter for teaching purposes. Each is required to make a collection of minerals and rocks of the region, and to illustrate the assigned topic; and field excursions to several interesting localities are made for this purpose.

Chemistry. — The following are some of the topics considered: nature of chemical change, oxygen, nitrogen, air, hydrogen, water, the forms of carbon, carbon dioxid, coal, illuminating gas, combustion and flame, foods, respiration, fermentation, manufacture of lime, iron and glass, acids, alkalies, salts.

Each student prepares simple apparatus and performs experiments, being guided to the proper interpretation of the observed results by printed questions and directions. Ability to use experiments in teaching is especially sought. Those who work faster or who have had the subject matter before are given extra exercises, adapted to their ability, to present before the rest of the class.

The laboratory work is followed by class discussions, and notes on each experiment are written, which are expected to be in good form, correct in English, and to cover the following points: —

1. Purpose of the experiment (topic to be illustrated).
2. Apparatus (what we use).
3. Experiment (what we do).

4. Results or observations (what we learn by the senses).

5. Inferences and explanations (what we learn by thinking, reading, etc.).

6. Applications (what things in every-day life, in nature, in other studies, the experiment may be used to teach or illustrate).

Special attention is given to the applications of experiments in explaining the facts of common life, or of other studies, such as mineralogy, human physiology, and nature study. Visits are made to the gas works, a lime kiln, and an iron foundry.

Physics. — The aims and the method are the same as in chemistry. Portions of the subject are selected, which, it is thought, will be most useful to teachers in elementary schools, such as: pressure in water and air, with applications to city water systems, artesian wells, hydraulic press, specific gravity methods, barometer, pumps, siphon, breathing, etc.; nature, properties and states of matter; simple machines, and the conservation of energy; heat, and its manifold applications. In addition to the individual laboratory work, students perform assigned experiments before the class, and question their classmates about the results and their explanation. Having gained some knowledge of physical principles, some power to reason from effect to cause, some skill in experimentation and in questioning, and having learned how to study and to plan lessons, students conduct similar exercises (in other portions of the subject) in connection with other studies and in the training school.

The school is well supplied with apparatus; but special pains are taken to teach students to improvise, from such materials as may be gotten anywhere, inexpensive apparatus, which they may take into the schools to illustrate the simpler facts of physics, physical geography, and human physiology.

The work is chiefly qualitative, but wherever possible computations based upon measurements made in the experi-

mental work are the means of correlating physics and mathematics and of securing greater power in both.

Drawings or diagrams are required when they can be made to aid in the expression of conditions and results.

Botany. — Plants are studied as living, breathing, working beings, with structure adapted to their functions and their surroundings. Hence plant physiology is given a prominent place and experiments are performed by members of the class to show how plants live and grow. The work is begun in the winter, with twigs and buds of trees in the hands of each pupil. These are put in water, and their development watched. Each student plants seeds of squash, bean, pea, and corn, which are cared for in the laboratory, and the morphology of the seeds and seedlings is made out. Drawings, properly labelled, to illustrate gross structure, are asked for, which though they be diagrammatic, will not merely suggest but will express accurate conceptions of the real construction of the object represented.

The cycle of life-changes from seed to seed again is traced, such topics as the following being used: —

The conditions of germination.
Storage of food in seeds, etc.
Roots and root work.
Relations of plants to the soil.
Stems and their uses.
Buds and what they promise.
Leaf arrangement, with reference to light, air, water.
Food of plants, — how taken, how used.
Leaf structure and work.
Nature and uses of floral organs.
Fertilization, pollination and cross-pollination.
Fruits, and their uses to the plant.
Seed dispersal (what plants do for their young).
Relations between plants and animals.
Uses of plants to man and other animals.
How plants protect themselves.
The struggle for existence among plants.

One or more topics, with references to text-books and reference books, are assigned to each member of the class, who prepares an outline of the subject matter, collects material to illustrate the same, teaches or presents a portion of the subject to the rest of the class, and prepares a plan for teaching a similar lesson to children.

As the season allows, outdoor excursions are taken, to study plants alive and at home. The work is confined almost wholly to the higher plants, for lack of time and because microscopic work is considered to be neither suitable nor feasible for elementary schools. Prepared slides are shown by the compound microscope, or projected on the screen.

Zoölogy. — A series of typical animals is so studied as to make out their plans of structure and the adaptation of their structure to habits and surroundings. Related forms are compared with these, and some idea of classification is developed. Each student examines both live and preserved specimens, furnished by the school or collected by himself, being guided by definite directions and questions for thought. The facts observed are expressed by labelled drawings and by written statements.

The use that may be made of the material in giving animal lessons in elementary schools is constantly kept in mind. Hence such forms as are easily obtained in the interior are selected, and very little dissecting or microscopic work is required.

The work begins in the fall, with the study of insects, such as locusts and crickets, dragon flies, house flies, butterflies and moths, honey bees and wasps. Their life history is traced by means of a series of imported preparations, showing all stages from egg to adult (see "Equipment"), and also, as far as possible, by means of live specimens.

Other animals studied are the lobster, the spider, the centipede, the millipede, the earthworm, the fish, the frog and its development, common birds, and mammals.

Special topics are assigned for library work, lesson plans are prepared and teaching exercises conducted as in botany.

Physiology. — The course includes so much of anatomy as will make vivid the harmony between structure and function, so much of physiology as will emphasize the fundamental importance of the vital functions, and so much of personal hygiene as should be practised by one knowing his body as a physical organism, the abode and instrument of his mind, and respectful of it because of its possibilities in use, strength, and beauty.

The range of the subject is: The human body as a whole; its external and structural parts; general plan of the body; the general structure of the limbs and walls and the different systems of the body, — digestive, absorbent, circulatory, respiratory, secretory, excretory, osseous, muscular, and nervous; their functions; the conditions of health. School hygiene, sanitation and emergency lessons receive proportional consideration, our own environment furnishing ample and proper illustrations. The kind of work is distinctly objective and practical.

Gymnastics. — Health of the individual is the chief and constant consideration. Physical culture is induced by seeking to attain ideals of physical vigor, coördination and grace, by means of volitional, formal exercises and spontaneous games, and the habit of physical expression of noble ideals. The Swedish system of gymnastics is taken as the basis. Adaptations to needs and interests of children, youth, and adults are impressed vividly.

Instruction in the theory of gymnastics is correlated closely with the study of the human body as indicated under physiology. The physiological basis causes the importance of gymnastics as a need of personal health and as a feature of public school education to be acknowledged heartily, and leads to zealous action.

The gymnasiums are well ventilated and lighted, fully equipped, and conveniently adapted for formal exercises, games, and athletics.

Geography.

Geography is knowledge of the earth as the home of man.

Elementary geography is knowledge of the appearance, activities, uses and distribution of geographical objects. This includes the three phases of work common to all studies: (1) the acquisition of ideas from the objects; (2) the expression of these ideas objectively (*e.g.*, by modelling, showing similar objects), by drawing and by symbols; (3) the reading of models, pictures, and symbols to recall and acquire ideas.

The main divisions of elementary geography are: —

Preliminary Study of Geographical Objects. — This work is properly a section of nature study, and is treated as such. It includes: (1) the observation, comparison, grouping and reasoning concerning local objects; (2) the expression of this knowledge by modelling, drawing, and the use of symbols, especially *geographic symbols;* (3) the imagination of geographical objects and relations different from those at home, by the aid of pictures, text, and conversation; (4) the reading of maps of his own locality, of distant regions, especially of those places of which he has seen pictures. In this phase of imaginative work much emphasis is given to thinking the appearance and activity of the objects represented; location is of secondary importance.

This preliminary study includes the different elements which enter into child life, — physical, biological, and sociological. The elements most common in children's experience are the industrial and commercial, and caution is needed lest the teaching of the physical element receives undue emphasis. The physiographic conditions are but the basis of biological and sociological aspects.

The Earth a Whole. — It is the first presentation to the imagination of pupils of the simple world-wide views of the earth as the home of man. Each pupil is led to feel: —

1. That the earth is a whole, a unit, having qualities or powers as a whole differing from the qualities of its parts.

2. That each part, land, water, atmosphere, and life, has its own qualities, differing from the qualities and powers of all other parts.

3. That the several parts and the whole are all *working* together to make the earth a home for man, and the means of his progress to better, nobler, higher life.

The Continents. — The order and purpose in the study of each continent are to : —

1. Find what part of the world ridge, of the world drainage, of the world climate, of the world productions, of the world races, each continent includes. This is review work.

2. Find such new or peculiar details of relief, drainage, climate, soil, productions, and people as are necessary to understand and appreciate the work of the continent and its inhabitants in the development of the people of the continent.

3. Think the continent anew in its relation to the world ridge, yet with more completeness, in order to perceive more clearly the special use and influence of each continent in the development of the whole human race, and to emphasize the interdependence of continents and of people.

Especially the dependence of all life forms on geographic conditions is made prominent. So, too, the influences of past and present physiographic phenomena are noted.

The Leading Nations. — The people, not the territory, are the central thought. The territory is the place of past and present activities. The relations of the geographical objects in such a territory as used and modified by man in his progress are essentially historical. Hence geography and history are inseparable in this division of the subject. The general order of thought and the aim in the study of the nations is to : (1) trace briefly their past progress ; (2) find the natural advantages or disadvantages of geographic conditions ; (3) find intentional use made of geographic conditions to facilitate progress ; (4) ascertain with considerable fulness their present status and progress ; (5) discern international relations and their effects ; (6) measure their respective usefulness to mankind.

The State and its Neighbors. — The study of the State is not to follow the study of nations, but from the beginning and at every stage of the course such facts as pertain to the State are culled and emphasized. At the end of the course the geography and history of the State are reviewed with great care. The teaching of the geographic conditions of the territory of the State, of the past and present usefulness of her citizens and of the opportunities to be grasped, arouses in every pupil such a love of country, such a pride in the State as stirs him to make her more glorious even in the future than in the past.

The City or Town. — The current thought is as for the study of the State. Local geography and local history are inseparable. The past and present place and usefulness of the city or town in any or all the relations of life are taught, with the purpose of making every child an interested, intelligent, active citizen.

Trips. — Nature and man have very materially added to our sources for study in this vicinity. Erosion, including the formation of limestone gorges, caverns, sinks and a natural bridge, and other forms of water action in stream and pond, are abundantly illustrated; glacial smoothing, scratching, and deposition are prominent; and the processes of mountain building and destruction are easily demonstrable.

The industries of our manufacturing region are unusually varied, and afford admirable basis for industrial, commercial, and social conditions.

In order to realize these opportunities, over fifteen trips have been made by the class during the past year. About half of these occurred during school hours, and were required; the remainder, mostly Saturday excursions, have been voluntary and well attended. None were made exclusively geographical, but features of biological, physical, geological, historical, governmental, and literary interest were carefully observed and discussed. The scope of observation is indicated by this list of places visited: Adams (South Hoosac) valley; Beaver (North Hoosac) valley;

natural bridge; Greylock foot-hills and cascade; Greylock; cotton, woolen, paper, grain mills; Arnold Print Works; shoe shop; newspaper office; cutlery works (Turner's Falls); Deerfield and Connecticut valleys; Deerfield; Concord, Lexington, Cambridge, Boston and Plymouth.

History.

This course includes a study of English and United States history and the principles of civil government. Eight text books are issued to each pupil during the course and his use of these is guided by a topical outline and by references from the instructor. These are supplemented by a large departmental library and a series of charts and maps.

The aims in the course are as follows: —

1. To find that history means development.
2. To find that knowledge of history is not a knowledge of facts but of relations.
3. To show the value of the law of cause and effect in history.
4. To find relation of historical development to geographical environment.
5. To learn of the development of the people, and institutions with which our country began.
6. To see the evolution in our own country's history through the stages (aboriginal, discovery, settlement, contest, revolution, national growth, slavery, and development), with their accompanying social, political, and religious life.
7. To develop patriotism and interest in present-day affairs (contemporary problems).
8. At all parts of the course to find from our own mental activity the ways of teaching each period; and to find the proper use of pictures, maps, and books.
9. To see the peculiar value of history among school subjects of developing patriotism, hero worship, and the social instincts.

The conduct of the course begins with a brief study of the periods in the development of English history; the printed

outline guides the reading, points out the relations; individual reflection is stimulated by pointed questions. This is followed by study of periods in United States history; while no one of these is studied exhaustively, type lessons are given and lesson plans and teaching exercises are submitted by the pupils. The principles of town, city, county, State, and national government are introduced as they developed historically; they are made real by visits to State or city elections, and by town and city reports. Weekly discussion of current events and present-day problems lends interest and enforces the thought that history is a living, growing subject.

The work of the past year has been supplemented further by voluntary trips to the historical collections in North Adams, to old Deerfield, and Concord, Lexington, Cambridge, Boston, and Plymouth.

Mathematics.

Geometry. — The scope of the work is: (1) geometric magnitudes, illustrated by models; (2) relations, measurements, drawings, descriptions, definitions; (3) study of plane figures and discovery of theorems; (4) study of solids, discovery of theorems, measurements (according to time); (5) objective and mathematical demonstration; (6) occurrence of geometric forms in nature, art, and architecture; (7) conception of the geometric magnitudes as real, non-material, accompanying all preceding steps.

Algebra. — The scope of the work is: (1) generalizations leading to laws of number, as exemplified in six fundamental processes, — addition and subtraction, multiplication and division, involution and evolution; (2) use of axioms in solving of equations, simple and quadratic; (3) deducing of formulas, their interpretation and application as in factoring, transformation of fractions, binomial theorem, etc.

Arithmetic. — The scope of the work is: (1) number, as applied to measured quantity, as length, area, volume, capacity, weight, money values, time, etc.; (2) considera-

tion of objects adapted to number teaching; (3) drawing, cutting, building, to find and illustrate values in relation to unit of quantities, in relation to each other; (4) six fundamental processes (see algebra), laws of number as used in each; (5) application of processes in mensuration, proportion, forms of percentage, etc.; (6) applications to actual conditions of life, — industrial, commercial, governmental, social.

English.

The general aim of the work in the department of English is so to acquaint the student with the many forms of English expression as to impress him with the importance of the teaching of English. Study of the student's personal experience in learning and that of children in the grades is made the basis of all study of methods. The course comprises language, grammar, literature, and reading. The subjects are correlated as much as possible.

Language. — The order of teaching is: (1) the significance of language; (2) what it includes; (3) the various means by which the language power and knowledge of the child are increased in the lower grades; (4) the methods and values of the forms of teaching, together with devices. Stress is laid upon story-telling, the use of pictures, letter-writing, and the principles of composition. Constant practice by the student in the doing and teaching of these things is required.

Grammar. — The study of scientific grammar is pursued for its disciplinary value to the student, — for the purpose of training the mind into thinking abstract relations. The discovery of a logical order in the teaching is made, and from the knowledge thus gained elementary grammar is directly derived by the student.

Literature. — The value of literature as one of the most important factors in spiritual education is emphasized. Sympathetic and appreciative rather than critical study is made of some of the masterpieces of both British and American literature, primarily for the sake of general culture.

Certain guiding principles of the art are discovered and applied, and comparisons made for the training of the judgment and the formation of ideals. Children's literature is explored to some extent, and such a study of books, commonly recommended, made as will help to make the student a trustworthy guide.

Reading. — Such a study of a piece of literature is made as will tend to bring the author and the student into unity in the one emotional experience. Means of accomplishing this with children of different grades and by pieces of varying complexity are considered. Mechanical perfection of the voice is made subordinate, and is taught as a means of revealing the inner life. Reading is thus found to be the important test of the intellectual and spiritual appreciation of literature.

Latin.

This course is provided for special and graduate students, to prepare them as teachers of Latin for the upper grammar grades.

The constant aim in the course is to treat Latin as idiomatic expression of thought rather than an arbitrary combination of words; that it differs from English as the thought processes differ in addition to the differences of inflection. The method of work from the first is shown by these principles: —

1. Thought units — sentences — should be dealt with from the first.

2. Thoughts should be understood, through eye and ear, before reproduction of any sort is attempted.

3. Reproduction, or retranslation into Latin, should be in every respect accurately done, orally and in writing.

4. Frequent repetition and retranslation are necessary for fixing right forms of expression and as a step toward thinking in the language.

5. Variations from the exact forms studied may be gradually introduced, in a conversational way as a step toward Latin composition.

6. Original Latin should not be allowed until late in the course, and then only such as is similar in style to that previously studied.

7. Grammar and syntax should be studied from the language itself. This inductive principle is not pushed to the extreme of requiring pupils to discover everything anew, but the forms and uses are apprehended before they are described.

The pedagogical reasons for these principles are found by discussing the ways in which a child acquires the mother tongue and any modern foreign language, and by comparing the powers of the adult with those of the child and the objects of modern with those of ancient language study.

As soon as it is feasible, the reading of a Latin text is begun. Oral reading and memorization are made prominent, in order to cultivate the feeling of the Latin as an expression of thought and the perception of style. Careful attention is given to discussing the selection of text-books, and the adaptation of class recitations to individual needs.

Drawing.

The purpose of our art study is to consider the principles governing good art, to study and enjoy examples of art embodying these principles, to give an appreciation of harmonious coloring, and to feel the connection existing between the arts, music, literature, and painting, realizing that all are governed by the same general principles. Students should be alive to see and enjoy whatever is beautiful in the world about them and in their own work to realize that "art is simply doing whatever one has to do in the best possible way."

The class work is grouped under the following heads: Appearance, — perspective elements, pictorial drawing (single objects, grouping, and composition). Structure, — elements of form, elements of beauty, structural design. Enrichment, — color, elements of ornament, decorative design.

An abbreviated course in the history of art is carried on,

parallel with these subjects, and the pupils are encouraged to have art albums for reproductions of the world's best examples of architecture, ornament, sculpture, and painting.

The pupils use the following mediums of expression: watercolor, pencil, charcoal, and blackboard crayon. Blackboard illustrative work from memory along all lines of work studied is a prominent feature of the course.

Music.

Tone perception: listening to voice and piano; scale tones and exercises by imitation; writing from oral dictation.

Tone production: securing softness, sweetness, purity of tone; developing appreciation of beauty of tone; study of child voice.

Sight reading: daily practice in music; thinking, silent and oral reading.

Analysis of form: developing understanding and appreciation of musical form; most important forms analyzed; illustration by voice and piano; application in appropriate phrasing, etc., in oral work.

Melody: laws illustrated; study of melodies from the symphonies, sonatas, oratorios, operas, and of the best songs; writing of original melodies; study of children's songs, with reference to selection for school use.

History: lives of eminent composers; illustrations, vocal and instrumental, to gain familiarity with types and cultivate taste for music.

Interpretation: piano playing for pupils once a week in normal school and training school; explanations of graded selections, beginning with Schumann's "Scenes from Childhood," Gurlitt's "Album for the Young," Mendelssohn's "Songs without Words."

Chorus work: practice twice a week in chorus reading; a musical program given at Thanksgiving, Christmas, Easter, and on patriotic days.

Glee club: practice twice a week; two concerts given in the year; singing for pupils in training school.

GYMNASIUM

TRAINING SCHOOL (MARK HOPKINS SCHOOL).

Piano music: the collection includes works by eminent composers, graded from such works as mentioned under Interpretation, and progressing in difficulty to Beethoven's sonatas and Bach's fugues. These are kept near the piano for the use of students. A duplicate collection is in use in the training school.

Manual Training.

The term manual training means educational handwork, — the cultivation of the hand to express the ideas of the mind. The aim is the development of the individual through self-activity in manual expression. The work in the training school consists of designing, modelling in clay, carving, and simple construction, as the ability of the pupil permits. The problems increase in difficulty as the individual gains in ability, the purpose throughout being, so far as circumstances permit, to suit the work to the needs of the individual. Relative difficulty and interest are considered important factors. The normal students follow, as far as time permits, the line of work indicated for the training school, the object of the work not being to prepare teachers of manual training, nor to furnish an adequate course for individuals, in whose previous education hand training has not played an important part, but rather to demonstrate the value, and lead students to appreciate the importance, of handwork as an active factor in early education, and to prepare certain pieces of apparatus for teaching purposes.

TRAINING SCHOOL.

On an adjacent lot is a modern brick building, containing seventeen class rooms, an assembly hall, two large basements and the motor and boiler rooms. In an annex is the gymnasium, forty by seventy-two feet, supplied with Swedish apparatus sufficient for the accommodation of classes of forty pupils each. All grades are represented, beginning with the kindergarten and extending through nine years of primary and grammar work to the high school. In each

room is a regular teacher in charge of a class not exceeding forty pupils. The principal is free for teaching in any grade, and for the direct observation and instruction of the normal students.

Unusual opportunities are afforded for the study of children and the practice of teaching. Students begin their work in this school immediately upon their entrance into the normal school, and continue it regularly throughout the course. The rapidity of progress through the various stages of the training school work depends on the ability and previous experience of the student. In general the order of work is as follows: —

First Year. — First term: reading of individual children and of groups begun. Second term: observation of teaching and control emphasized.

Second Year. — Third term: study of school organization and management, and assisting in teaching and management. Fourth term: practice in teaching, the amount of responsibility conferred depending on the ability of the student.

Third Year. — Responsible charge of classes, elective work. Students who have taught successfully before entering are given opportunities for practice in teaching and disciplining as early in the course as their abilities warrant.

Close and appropriate supervision and instruction are given students by the regular teachers of the several grades and by the principals of the various departments, thus ensuring reasonable progress to students requiring extra opportunities in the practice work of teaching.

In the kindergarten department which occupies a suite of three rooms, which can be opened into one, students not only are trained to be kindergartners, but also are taught the importance of and the ways of continuing the kindergarten spirit into primary work. They observe and practise in the early primary grades, and are fitted thus to become kindergarten or primary teachers in the public schools as they may elect. The demand for such teachers is very far beyond the supply.

STUDENTS.

Graduate Students.

Josephine Anna Cady,*	North Adams.
Harriet Barstow Capron,	North Adams.
Dora Louella Cardany,	North Adams.
Rena Belle Chadwick,*	Dalton.
Euphemia Drysdale,†	North Adams.
Sarah Louise Post,	North Adams.
Clyde Haxton Winslow,*	North Adams.

Special Students.

Fannie Wood Ingraham,	Adams.
Eva Margaret Southworth,	Adams.
Nellie L. Sullivan,	Belchertown.
Hazel Tusler,	St. Paul, Minn.
Emma Charity Whitney,	Williamstown.

Senior Class.

Earl Elmer Miller,	Conway (Brier).
Edna Jerusha Bowen,	Adams.
Minnie Alice Burghardt,	Pittsfield.
Clara Virginia Cady,	North Adams.
Elsie Anna Case,	East Arlington, Vt.
Faith Gertrude Chase,	Cheshire.
Sarah Elizabeth Collins,	North Adams.
Elizabeth Marion Costello,	North Adams.
Dorothy Alice Darling,	North Adams.
Jessie Elizabeth Fairfield,	Adams.
Kathryn Frances Fitzgerald,	Pittsfield.
Daisy Elizabeth Hicks,	Adams.
Maude Stella Ingalls,	Cheshire.
Marion Hopkins Ketchum,	North Adams.
Ethel Florence Lee,	North Adams.
Margaret Ruth Logan,	Hinsdale.
Josephine May Maxam,	North Adams.
Margaret Eleanor Morey,	Cheshire.

* Kindergarten course. † Three years' course.

Ellen Charlotte Murphy,	Pittsfield.
Anna Evelina Owen,	North Adams.*
Sadie Leffingwell Palmer,	Stockbridge.
Edna Mae Parker,	Lee.
Alice Julia Peasley,	Orange.
Mabel Lucy Phelps,	North Adams.
Blanche Ella Phillips,	West Stockbridge.
Christine Elizabeth Monica Somers,	Adams.
Maud Lillian Spencer,	Lee.
Estelle Jennie Spooner,	Williamstown.
Amy Whitman Strecker,	Greenfield.
Susan Gertrude Streeter,	Adams.
Lina May Tillotson,†	Lenox.
Bessie Maude Watson,	North Adams.
Florence Ethyl Whipple,	Greenfield.
Minnie May Williams,	North Adams.

KINDERGARTEN COURSE.

Bessie Sherwood Barnes,	Pittsfield.
Helen Adaline Browne,	North Adams.
Julia Agnes Stapleton,	Pittsfield.
Florence Adelina Walbridge,	Bennington, Vt.
Edith Maybel Watkins,	Williamstown.

JUNIOR CLASS.

Frank Merritt Rich,	Adams.
Winnifred Belle Barber,‡	North Adams.
Lottie Martha Bradford,	Egremont (South).
Eleanor Hayward Brown,	Great Barrington §
Mary Newcomb Brown,	Greenfield.
Ethel May Burt,	Pittsfield.
Margaret Veronica Carey,	Sheffield.
Mary Agnes Carey,	Richmond.
Effie Caroline Clark,	Pittsfield.
Katherine Collins,	North Adams.
Frances Gertrude Conlon,	North Adams.
Mabel Robinson Coombs,	Colrain.
Adeline Cousins Damon,	Pittsfield.
Helen Morgan Davidson,	Pittsfield.
Grace Louise Donelson,	Colrain.
Myrtle Newcomb Fake,	North Adams.

* Blackinton.
† Entered February, 1899.
‡ Entered February, 1900.
§ Housatonic.

Ida May Foote,	Adams.
Lilla M. Fuller,	Charlemont.
Mary Elizabeth Glynn,	Falmouth.
Gertrude Louisa Harrington,*	North Ferrisburgh, Vt.
Anna Elizabeth Kaley,	Hinsdale.
Elizabeth Mary Lyman,	Huntington.
Ada Isabelle McLean,	Williamstown (South).
Florence Agnes McSweeny,	Pittsfield.
Agnes Eugenia Miner,	North Adams.
Mary Elizabeth Morey,	Leyden.
Nellie Ann Pendlebury,	Great Barrington.†
Mary Ellen Russell,	Adams.
Mary Magdalen Ryan,	North Adams.
Caroline Persis Sherman,*	Williamstown.
Mary Sever Sparks,*	Lee.
Mae Manola Tyler,	North Adams.
Sylvia Louise Williams,	Haverhill.
Madeline Emma Wood,	Greenfield.

Kindergarten Course.

Mabel Idora Adams,	Charlemont.
Gertrude Edna Billings,	North Adams.
Cecille Mabelle Bowden,*	Miles City, Mon.
Agnes Fleming Brown,	North Adams.
Dorothy Elizabeth Davies,	North Adams.‡
Gertrude Jane Orr,	North Adams.
Agnes Laura Spooner,	Williamstown.

Summary.

Graduate students,		7
Special students,		5
Senior class: —		
Two years' course,	34	
Kindergarten course,	5	
		39
Junior class: —		
Two years' course,	33	
Three years' course,	1	
Kindergarten course,	7	
		41
Total,		92

* Entered February, 1900. † Housatonic. ‡ Blackinton.

SPECIAL NOTICE.

The principal will find boarding places for non-resident students. The cost of board is from three dollars and one-half upward. In case of doubt concerning preparation for entrance, the work of the school or other details, write freely to the principal, or call upon him at his house, which is beside the school building. A note in advance will secure an appointment.

STATE NORMAL SCHOOL

AT

NORTH ADAMS, MASS.

Established June, 1894

CIRCULAR AND CATALOG

FOR YEAR ENDING JUNE 30, 1901

BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS
18 POST OFFICE SQUARE
1901

STATE BOARD OF EDUCATION

Established 1837

EX OFFICIO

His Excellency W. Murray Crane, Governor
His Honor John L. Bates, Lieutenant-Governor

BY APPOINTMENT

George H. Conley, A.M.	Brookline	May 25, 1901
Mrs. Alice Freeman Palmer	Cambridge	May 25, 1902
Joel D. Miller, A.M.	Leominster	May 25, 1903
Mrs. Kate Gannett Wells	Boston	May 25, 1904
Franklin Carter, Ph.D., LL.D.*	Williams College	May 25, 1905
Clinton Q. Richmond	North Adams	May 25, 1905
George I. Aldrich, A.M.	Newtonville	May 25, 1906
Elmer H. Capen, D.D.	Tufts College	May 25, 1907
Elijah B. Stoddard, A.M.	Worcester	May 25, 1908

SECRETARY

Frank A. Hill, A.M., Litt.D. . . . . State House, Boston

CLERK AND TREASURER

C. B. Tillinghast, A.M. . . . . State House, Boston

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John T. Prince, Ph.D.	West Newton
G. T. Fletcher, A.M.	Northampton
James W. MacDonald, A.M.	Stoneham
Henry T. Bailey	North Scituate
L. Walter Sargent, *Assistant*	Boston

BOARD OF VISITORS

Franklin Carter * Elijah B. Stoddard
Clinton Q. Richmond

* Resigned.

FACULTY

FRANK FULLER MURDOCK, *Principal*
Psychology, Pedagogy

ROLAND W. GUSS . . . . . *Natural Science*
CHARLES H. STEARNS * . . . . . *Manual Training*
LYMAN R. ALLEN * . . . . . *History, Geography, Latin*
ANNETTE M BARTLETT . . . . . *Mathematics, Music*
MARY A. PEARSON * . . . . . *Drawing*
CATHERINE W. PARKER . . . . . *English, Reading*
ANNIE C. SKEELE * . . . . *Physiology, Physical Culture*

MRS. DONNA D. COUCH, *Principal of the Training School*

ROSA E. SEARLE
HARRIETTE P. RYDER
HANNAH E. MAGENIS
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HANNAH P. WATERMAN
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ADA B. BRAGG
SUSAN G. LOMBARD
SARAH E. BOWER
EMMA H. TINGUE
MARGARET F. COLLINS
SUSAN A. CLEGHORN
MYRA E. FISKE

EVA L. MCCONKEY, *Principal of Kindergarten Department*
LILIAN S. DANIELS, *assistant*
ANNIE BOYD, *pianist*

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* Instructors in the training school also.

CALENDAR

1901

Graduation
Tuesday, June 25.

First Entrance Examination
Thursday and Friday, June 27 and 28, at 9 A.M.

Second Entrance Examination
Tuesday and Wednesday, September 10 and 11, at 9 A.M.

School Year Begins
Training School, Monday, September 9.
Normal School, Thursday, September 12, at 9 A M.

Thanksgiving Recess
Begins Tuesday night, November 26. Ends Monday night, December 2.

Christmas Recess
Begins Thursday night, December 19. Ends Monday night, December 30.

1902

Second Term Begins
Monday, February 3.

Spring Recess
Begins Friday night, March 21. Ends Monday night, March 31.

Graduation
Tuesday, June 24.

First Entrance Examination
Thursday and Friday, June 26 and 27, at 9 A.M.

Second Entrance Examination
Tuesday and Wednesday, September 9 and 10, at 9 A M.

Thanksgiving Recess
Begins Tuesday night, November 25. Ends Monday night, December 1.

Christmas Recess
Begins Thursday night, December 18. Ends Monday night, December 29.

Sessions are from 9 A.M. to 12 M., and 1.30 P.M. to 4 P.M. Saturday sessions are omitted.

Entrance examinations on the dates given above begin at 9 o'clock A.M., in the assembly hall. Candidates are to be present at the opening and on both days. They should come prepared to stay in September, as the term begins on the following day.

For information about the school address the principal at North Adams.

State Normal School

AT NORTH ADAMS, MASS.

HISTORICAL.

By an act of Legislature approved June 6, 1894, four new normal schools were established. Of these, the school at North Adams was one. The first class was received Feb. 1, 1897.

LOCATION.

North Adams is distinctively picturesque. The elevations that surround the city are among the most attractive of the Berkshire hills. On the north side are rounded domes of the Green Mountains, on the east the abrupt wall of Hoosac Mountain overhangs the city, while on the south-west border rise the outlines of massive Greylock, the highest peak in Massachusetts.

On the westerly slope of an eminence rising several hundred feet above the river are situated the school buildings. Of the many beautiful locations in Berkshire County, the one chosen is remarkably fine. The near rounded domes, the deep retreating valleys, the winding streams, with all their changing life and aspects, always please and inspire. The noisy hum of the city slightly removed, the beauties of nature close at hand, the duties of student life are made easy and profitable to an unusual degree. The city of North Adams was both wise and generous in its gift of a location. Especially noteworthy are the facilities for out-door study of nature and of industry.

The city is easily reached from the east and west by the Fitchburg Railroad, from the south by the Boston & Albany road. Electric cars connect the city with Adams and Williamstown.

BUILDINGS.

The buildings in exterior are of yellow brick and white marble, with metal roofs. The school building, in Italian style, is one hundred and fifty-two feet long, eighty-four feet deep, and three stories and basement in height. It is of slow-burning construction, the floor timbering and roof being carried with steel beams and trusses. The arrangement of stairways, which are iron, gives easy and safe egress.

In the basement are the boiler, engine, fuel, heating and janitor's rooms, a lunch room, gymnasium and bath rooms, a room for manual training and a photographic dark room; in the first story, two reception rooms, cloak, coat and toilet rooms, and four natural science laboratories; in the second story, the assembly hall, office, libraries, and class rooms for the languages and mathematics; in the third story, the physical and chemical laboratories, the art rooms and a general class room; and in the attic is ample space for storage.

The interior is finished in oak throughout and provided with modern improvements and facilities. Cabinets, drawers, closets, specially adapted to the needs of the school, are provided in all the rooms. In strength, simplicity, beauty and adaptation to its use the school building is not surpassed.

REQUIREMENTS FOR ADMISSION.

Candidates for admission to any one of the normal schools must have attained the age of seventeen years complete, if young men, and sixteen years, if young women.

1. They must be free from any disease or infirmity which would unfit them for the office of teacher.

Provision is made "for a physical examination of candidates for admission to the normal schools, in order to deter-

mine whether they are free from any disease or infirmity which would unfit them for the office of teacher, and also to examine any student at any time in the course, to determine whether his physical condition is such as to warrant his continuance in the school."

2. They must present certificates of good moral standing.

3. They must give evidence of good intellectual capacity (records of their scholarship standing in the high schools are desired).

4. They must be graduates of high schools whose courses of study have been approved by the Board of Education,

5. Or they must have received, to the satisfaction of the principal and the Board of Visitors of the school, the equivalent of a good high school education.

It may be said, in general, that, if the ordinary work of a good statutory high school, as defined by section 2, chapter 496 of the Acts of 1898, is well done, a student should be able to meet the requirements of these examinations.

The importance of a *good record in the high school* cannot be over-estimated. The stronger the evidence of character, scholarship and promise, of whatever kind, candidates bring, especially from schools of high reputation and from teachers of good judgment and fearless expression, the greater confidence they may have in guarding themselves against the contingencies of an examination and of satisfying the examiners with their fitness.

Reasonable allowance in *equivalents* will be made in case a candidate, for satisfactory reasons, has not taken a study named for examination. Successful experience in teaching is allowed to be taken into account in the determination of equivalents.

ORAL EXAMINATIONS.

Candidates will be questioned orally either upon some of the foregoing subjects or upon matters of common interest to them and the school, at the discretion of the examiners. In this interview the object is to gain some impression about

the candidates' personal characteristics and their use of language, as well as to give them an opportunity to furnish any evidences of qualification that might not otherwise become known to their examiners. Any work of a personal, genuine and legitimate character that candidates have done in connection with any of the groups that are set for examination, and that is susceptible of visible or tangible presentation, may be offered at this time, and such work will be duly weighed in the final estimate, and may even determine it. To indicate the scope of this feature, the following kinds of possible presentation are suggested, but the candidates may readily extend the list: —

1. A book of drawing exercises, — practically such a book of exercises as one might prepare in following the directions in "An Outline of Lessons in Drawing for Ungraded Schools," prepared under the direction of the Massachusetts Board of Education, or in developing any branch of that scheme.

2. Any laboratory note-book that is a genuine record of experiments performed, data gathered or work done, with the usual accompaniments of diagrams, observations and conclusions.

3. Any essay or article that presents the nature, successive steps and conclusion of any simple, personally conducted investigation of a scientific character, with such diagrams, sketches, tables and other helps as the character of the work may suggest.

4. Any exercise book containing compositions, abstracts, analyses or other written work that involves study in connection with the literature requirements of the examination.

WRITTEN EXAMINATIONS.

The written examination will embrace one paper upon each of the following groups, with a maximum time allowance of two hours for each of groups I., II. and IV., and of one hour for each of groups III. and V.: —

I. *Languages.* — (*a*) English, with its grammar and literature, and (*b*) one of the three languages, — Latin, French and German.

II. *Mathematics.* — (*a*) Arithmetic, (*b*) the elements of algebra and (*c*) the elements of plane geometry.

III. *History and Geography.* — The history and civil government of Massachusetts and the United States, with related geography and so much of English history as is directly contributory to a knowledge of United States history.

IV. *Sciences.* — (*a*) Physical geography, (*b*) physiology and hygiene, (*c*) physics, (*d*) botany and (*e*) chemistry.

V. *Drawing and Music.* — (*a*) Elementary, mechanical and freehand drawing, with any one of the topics, — form, color and arrangement, and (*b*) musical notation.

SPECIAL DIRECTIONS.

No candidate will be accepted whose written English is notably deficient in clear and accurate expression, spelling, punctuation, idiom or division of paragraphs, or whose spoken English exhibits faults so serious as to make it inexpedient for the normal school to attempt their correction. The candidate's English, therefore, in all oral and written examinations will be subject to the requirements implied in the foregoing statement, and marked accordingly.

Languages.

(*a*) *English.* — The importance of a good foundation in English cannot be overrated. The plan and the subjects for the examination will be the same as those generally agreed upon by the colleges and high technical schools of New England. While candidates are strongly advised to study, either in school or out, *all* the works given in this plan, the topics and questions will be so prepared for 1901, and thereafter until further announcement, that any candidate may expect to meet them who has mastered *half* of the

works assigned for reading (or a bare majority of them) and *half* of the works assigned for study and practice, the selection to be at the candidate's option or that of the school which he attends.

1. *Reading and Practice.* — A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject matter, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of several topics to be chosen by the candidate from a considerable number — perhaps ten or fifteen — set before him in the examination paper. The treatment of these topics is designated to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. In place of a part or the whole of this test, the candidate may present an exercise book properly certified by his instructor, containing compositions or other written work done in connection with the reading of the books. In preparation for this part of the requirement, it is important that the candidate shall have been instructed in the fundamental principles of rhetoric.

The books set for this part of the examination will be: —

1901, 1902. — Shakespeare's *The Merchant of Venice;* Pope's *Iliad*, Books I., VI., XXII. and XXIV.; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

1903–1905. — Shakespeare's *The Merchant of Venice* and *Julius Cæsar; The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

2. *Study and Practice.* — This part of the examination presupposes a more careful study of each of the works named below. The examination will be upon subject matter, form and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy. In addition the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong.

The books set for this part of the examination will be: —

1901, 1902. — Shakespeare's *Macbeth;* Milton's *Lycidas*, *Comus*, *L'Allegro*, and *Il Penseroso;* Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

1903–1905. — Shakespeare's *Macbeth;* Milton's *Lycidas*, *Comus*, *L'Allegro*, and *Il Penseroso;* Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

(*b*) One only of the three languages, — *Latin*, *French* and *German*. The translation at sight of simple prose, with questions on the usual forms and ordinary constructions of the language. The candidate is earnestly advised to study *Latin* and either *French* or *German*.

II. Mathematics.

(*a*) *Arithmetic.* — Such an acquaintance with the subject as may be gained in a good grammar school.

(*b*) *Algebra.* — The mastery of any text-book suitable for the youngest class in a high school, through cases of affected quadratic equations involving one unknown quantity.

(*c*) *Geometry.* — The elements of plane geometry as presented in any high school text-book. While a fair acquaintance with ordinary book work in geometry will, for the present, be accepted, candidates are advised, so far as practicable, to do original work with both theorems and problems, and an opportunity will be offered them, by means of alternative questions, to test their ability in such work.

III. History and Geography.

Any school text-book on United States history will enable candidates to meet this requirement, provided they study enough of geography to illumine the history, and make themselves familiar with the grander features of government in Massachusetts and the United States. Collateral reading in United States history is strongly advised.

IV. Sciences.

(*a*) *Physical Geography.* — The mastery of the elements of this subject as presented in the study of geography in a good grammar school. If the grammar school work is supplemented by the study of some elementary text-book on physical geography, better preparation still is assured.

(*b*) *Physiology and Hygiene.* — The chief elementary facts of anatomy, the general functions of the various organs, the more obvious rules of health, and the more striking effects of alcoholic drinks, narcotics and stimulants upon those addicted to their use.

(*c*), (*d*) *and* (*e*) *Physics, Chemistry and Botany.* — The elementary principles of these subjects, so far as they may be presented in the courses usually devoted to them in good high schools. Study of the foregoing sciences, or of some of them, with the aid of laboratory methods, is earnestly recommended.

V. Drawing and Music.

(*a*) *Drawing.* — Mechanical and freehand drawing, — enough to enable the candidates to draw a simple object, like a box or a pyramid or a cylinder, with plan and elevation to scale, and to make a freehand sketch of the same in perspective. Also any one of the three topics, — form, color and arrangement.

(*b*) *Music.* — The elementary principles of musical notation, such as an instructor should know in teaching singing in the schools. Ability to sing, while not required, will be prized as an additional qualification.

TIMES OF EXAMINATION AND ADMISSION.

Examinations for admission to the normal schools are held at the close of the school year in June, and also at the beginning of the school year in September. Candidates are advised to present themselves at the first examination.

New classes are admitted to the normal schools at the beginning of the fall term. Candidates should come in September prepared to stay, as regular work begins on the day following the examinations. In exceptional cases admissions to classes already formed are allowed at the beginning of the second term.

PRELIMINARY EXAMINATION.

1. Candidates may be admitted to a preliminary examination a year in advance of their final examination, provided they offer themselves in one or more of the following groups, each group to be presented in full: —

II. Mathematics.
III. History and Geography.
IV. Sciences.
V. Drawing and Music.

See pages 13, 14.

Preliminary examinations can be taken in June only.

Every candidate for a preliminary examination must present a certificate of preparation in the group or groups chosen, or in the subjects thereof, the form of certificate to be substantially as follows: —

_____ has been a pupil in the

_____ School for _____ years and is, in my judgment, prepared to pass the normal school preliminary examination in the following group, or groups, of subjects and the divisions thereof:

_____

_____

Signature of principal or teacher, _____

Address, _____

2. The group known as "*I. Languages*" must be reserved for the final examinations. It will doubtless be found generally advisable in practice that the group known as "*IV. Sciences*" should also be so reserved.

Candidates for the final or complete examinations are earnestly advised to present themselves, so far as practicable, in June. Division of the final or complete examinations between June and September is permissible, but it is important both for the normal school and for the candidate that the work laid out for the September examinations, which so closely precede the opening of the school, shall be kept down to a minimum.

EXPENSES.

Tuition is free to all residents of Massachusetts. Each pupil from another State than Massachusetts attending a normal school supported by this State, from and after the beginning of the autumn session of 1901, shall pay to the principal of the school attended, at the beginning of each half-year session, the sum of twenty-five dollars for the use of the school.

Text-books and supplies are free, as in the public schools.

State aid, not exceeding one dollar and one-half per week, may be granted to deserving persons after they have been in attendance for at least one term, provided they are residents of Massachusetts, and do not live in towns where the normal schools are situated.

The principal will find boarding places for non-resident students. The cost of board is usually three and one-half dollars per week.

DEMAND FOR GRADUATES.

The demand for graduates during the past year has been double the supply. Usually half of each class secures positions before graduating. There is kept at the school a record

of each student, stating his position, salary, post-office address, kind of position desired, so that the principal is able to recommend teachers at once and appropriately. Blanks for application can be secured by writing.

COURSES.

The Two Years' Course.

This course is designed primarily for those who aim to teach in public schools below the high school grade. It comprises substantially the following subjects: —

1. Psychology, history of education, principles of education, methods of instruction and discipline, school organization and the school laws of Massachusetts.

2. Methods of teaching the following subjects: —

(*a*) English, — reading, language, rhetoric, composition, literature and history.

(*b*) Mathematics, — arithmetic, book-keeping, elementary algebra and geometry.

(*c*) Science, — elementary physics and chemistry, geography, physiology and hygiene, and the study of minerals, plants and animals.

(*d*) Drawing, vocal music, physical culture and manual training.

3. Observation and practice in the training school and observation in other public schools.

The Three Years' Course.

Some portion of a third year is necessary in order to afford sufficient practice in teaching to those students who have not had experience in teaching and who are planning to teach in grades not requiring Latin. It is a necessity that students spend all of a third year in the study of elective subjects and in the practice of teaching in order to take the more prominent and responsible positions in the elementary schools or to enter upon departmental teaching.

For students signifying at their admission their intention of pursuing a three years' course, it will be arranged so that elective subjects may be begun early in the course, instead of being postponed to the third year.

The Kindergarten Course.

The kindergarten course requires one year of study and training in the two years' course, including those studies which are essential to kindergarten work, and one year of practical work with the children and in the theory and history of the kindergarten. Students well prepared to enter upon this course may complete it in two years, but a longer time is needed in most cases to make one competent to be principal of a kindergarten. It is very desirable that the student should have the full two years' course and one year added for the special kindergarten training. Students pay the cost of material taken away for future use, but this expense does not exceed ten dollars for the course.

The conditions of admission to this course are the same as for the regular two years' course. In addition, there should be some facility in playing the piano and singing, if the better positions are to be secured.

Special Courses for Teachers.

Teachers of several years of successful experience in teaching, who give evidence of maturity, good scholarship and of aptness to teach, may, with the consent of the principal and of the Board of Visitors, select a course (including the course in psychology and pedagogy), and when such course is successfully completed they shall receive certificates for the same. Candidates are admitted to this course without written examination.

Teachers desirous of spending their vacations at the school are invited cordially to come at any time. Observation work, study of elected subjects or participation in regular course work and preparation of teaching material, are offered in all departments of the normal and training school. There

will be afforded every facility for study, the work being adapted to the wishes and capabilities of applicants, in so far as the permanent needs of the school permit. For subjects, see page 24.

Special Course for College Graduates.

Graduates of colleges and universities, and of high schools of a high grade and standing, who give evidence of maturity, good scholarship and of aptness to teach, may, with the consent of the principal of the school and of the Board of Visitors, select from the above curriculum of study a course which may be completed in one year, and when such course is successfully completed they shall receive a certificate for the same. Candidates are admitted to this course without written examination.

EQUIPMENT.

The four natural science laboratories are arranged in sequence, and by means of specimens and models in well-lighted wall cases is displayed the progression of mineral, plant and animal life to its final development in man. Banks of drawers are provided in the laboratories for collections of the varieties of each type displayed in the wall cases. At the tables are drawers for the working collections and tools distributed to students. In the instructor's laboratories are reserve specimens, models, pictures, charts and diagrams.

Worthy of special mention are the following materials for study: —

The synoptic and Howell's college collection of minerals and rocks in the mineralogical and geological laboratory.

In the biological laboratories are the Deyrolle plant models, illustrating twelve of the leading families; the synoptical collection of invertebrates and vertebrates; the preparations (wet and dry) showing the habits, homes and metamorphoses of many insects, the development of a snail, a leech, a crayfish, a horse-shoe crab, a spider, a fish, a sala-

mander, a frog, a toad, a snake and a lizard, displaying all stages of growth, from the egg to the adult form; dissected specimens of a clam, a crayfish, a lobster, a fish, a frog, a lizard, a turtle, a dove and a rat, displaying separately the digestive, circulatory and nervous systems; aquaria and cages; a series of skeletons, a human skeleton, a life-size manikin, a set of Auzoux models (eye, ear, larynx, brain, pelvis), and preserved vital organs.

In the geographical laboratories are several thousand carefully selected, mounted and classified pictures, including photographs, engravings, half-tones, bromide enlargements, the Hölzer series of oleographs and several hundred lantern slides. The models include the Jones eighteen-inch relief globe, Howell's (sixteen feet radius) model of the United States, and large model of southern New England, the Harvard series of physiographic models. Slated spheres, large and small globes are provided for class and individual use. Three sand-tables, each ten feet by four feet, afford abundant opportunities for sand modelling.

The collection of maps includes two maps of Switzerland, one beautifully shaded to show reliefs and drainage, and the other to show the same physical features combined with political and industrial features; two similar maps of Alpenland; Habenicht-Sydow physical series; Johnston political series; a series of thirty world maps, showing physical, productive and political features; coast survey charts; topographic maps and folios; a series of maps of Massachusetts, showing relief, drainage, cities, railways, counties, etc.; similar maps of Rhode Island and New Hampshire; a series of maps for study of map symbols; pamphlets, railway folders, magazines, etc., for commercial geography.

The mathematical department is supplied with collections of models for individual use and class observation in the study of geometry, arithmetic and algebra, in their appropriate development through all grades, including those of the high school.

The historical and literary departments are supplied with several hundred classified pictures and numerous charts.

The art departments are equipped with adjustable tables, models, type and ornamental forms, pictures, drawings and casts, illustrative of all the phases of modern art teaching.

The library has been selected with especial reference to the needs of teachers. Department libraries are proportionately represented, and furnish excellent opportunities for general reference work and special investigation. Magazines and pamphlets for general culture and departmental study are numerous, the pamphlet division already including several thousand copies.

The three laboratories for physics and chemistry are equipped with modern improvements, and with apparatus for individual experimentation in both qualitative and quantitative work.

The manual training room is furnished with twenty-five sloyd benches and tools for working in clay and wood.

The gymnasium is equipped with the apparatus for the practice of Swedish gymnastics.

An electric projection lantern and numerous slides have been provided. The lantern can be used in six different rooms, and supplements the work in the various sciences, in literature and in art.

DESIGN OF THE NORMAL SCHOOL.

"The design of the normal school is strictly professional; that is, to prepare in the best possible manner the pupils for the work of organizing, governing and teaching the public schools of the Commonwealth" (Board of Education, May 6, 1880).

The work of each department is to secure these ends: —

Pupils. — The leading motive and continuous effort are to change the pupil's point of view from that of the student to that of the teacher, to inspire him with the spirit of the true teacher, to train him to the noblest ideals and best habits of personality, thinking and teaching.

Children. — The pupil is placed from the beginning of his course in close contact with children, that through them there may be revealed to him such understanding of child-life in general and appreciation of the individual children as will impress upon his mind the necessity of their interests being his chief concern. That schools should be organized to satisfy the needs of children, that school management is the process of securing self-control by the children, that children should be taught, rather than subjects, are truths which are presented as of fundamental importance.

Subjects. — The thought of the pupil is carefully directed to the subjects of a public school course. Each subject is analyzed to find its content, its natural or logical order, its teaching order. The appropriate sources of knowledge are found, the prominent processes of acquisition are emphasized, and corresponding forms of expression exemplified. The knowledge, disciplinary, and cultural values of each subject are discussed. Stress is laid upon accuracy of knowledge and the use of each subject as a *means* and not an end in education. Natural and helpful correlations of subjects are made, and the place of each in a course of study indicated.

Teaching. — The process of learning is distinguished from the process of teaching, the pupil being led to perceive most definitely that in learning the student concentrates his thought upon the object, that in teaching the teacher concentrates his thought upon the student's mental process of learning. Pupils are led to discover by personal observation that the teaching process consists of two parts, namely, preparatory thought (*i.e.*, lesson planning) and consequent instruction (*i.e.*, teaching). Lesson plans are derived by the pupils from observed teaching and the study of typical plans, and are found to include consideration of (1) aims, that is, needs of the children to be satisfied; (2) right mental activity of the child; (3) appropriate sources of knowledge and interest. Lesson teaching is perceived to be (1) skilful use of sources of knowledge and interest, (2) which use stimulates right activity in each child, (3)

and enables him to satisfy his needs. Pupils, by practice in writing lesson plans and in teaching children in accordance with the plans, become certain that intimate knowledge of children and thorough lesson planning are, together with the personality of the teacher, the vital conditions for successful teaching; that lesson plans may free the teacher of the burden of the subject, and enable him to attend discreetly and heartily to the needs and interests of the children. Similarly the place and purpose of recitations, drills, examinations and criticism are brought before the pupils for consideration and judgment.

Organization. — The principles underlying the organization of a school are arrived at by the pupils by direct study of the training school and other schools they have experienced, by consideration of children's needs as individuals and as members of society, and by use of the experience of teachers and other educational authorities.

Government. — Pupils are led, by review of their own experiences in conforming, obeying and controlling, by the testimony of others, by their knowledge of children, by their efforts in the training school, and by their study of psychology, to understand the relations between knowing, feeling, and doing, to value and use the instinctive reactions, and to attempt to form habits in themselves and children of right self-activity for the sake of self-development and service to others.

The school laws of the State receive due and appropriate study, in connection with the consideration of organization, government and the history of education.

Order of Studies in the Two Years' Course.

Junior Class.		Senior Class.	
First Term.	Second Term.	Third Term.	Fourth Term.
Drawing.	Drawing.	Drawing.	–
Music.	–	Reading.	Reading.
Manual training.	Gymnastics.	Gymnastics.	Gymnastics.
Language.	Grammar.	Literature.	Literature.
Chemistry.	Physics.	Geography.	Geography (half term).
Mineralogy.	Botany.	Zoölogy.	History of education and school laws (half term).
Physiology.	–	History.	
Geometry.	Algebra.	–	Psychology and pedagogy.
Penmanship.	Arithmetic.	–	–
Child study: — Individuals. Groups.	Observation of teaching and control. Assisting.	School organization. Teaching at training school.	School management. Teaching and control.
Kindergarten course omits manual training, chemistry and part of geometry.	Kindergarten course omits algebra and part of the arithmetic.	Kindergarten course omits drawing and history.	Kindergarten course omits geography.

THE RANGE OF THE SUBJECTS.

The professional work is indicated in general on pages 21–23, under the topic, "Design of the School," but applies in detail to each of the subjects analyzed and described as follows. Accuracy and fulness of scholarship are strenuously emphasized.

Psychology and Pedagogy.

The study of children is continuous through the two years' course. Individual children are carefully observed to ascertain individual physical, mental and moral aptitudes and defects, in order that each child's needs may be satisfied. Groups of children, — the healthy and the sick, the

able and the weak, the bright and the dull, the tidy and the slovenly, the leaders and the followers, the good and the bad, etc., are found, and their relative numbers and importance estimated, that justice may be done to all. Based on these and similar observations made elsewhere are the pupils' conclusions as to native reactions, behavior, self-control and tact.

In their study of the individual subjects of the course, pupils are taught to recognize the elementary processes of acquisition, the emotions aroused, the importance of interest and the volitions resulting. The sources of knowledge, the stimuli of interest, the mental processes appropriate to the several subjects, and, in general, the conditions for right mental activity in each subject, are learned as individual facts.

In the observation and practice of teaching, effects of the teacher's knowledge of children, of subject, of fitness of mental process, of the influence of tact, of the possession of right habits, are discerned.

During the last term of the course, perception, memory, imagination, generalization, judgment, reasoning, the emotions and the will are studied in sequence and detail. Facts of the student's consciousness, observations of others' minds, and books are the sources of knowledge. The pupils thus come to an understanding of the elementary processes and their interdependence, of the importance of interest, of the conditions for best activity, and of the formation of habits. Principles of psychology and pedagogy are apprehended and appreciated because of their guidance of thought processes, their productiveness of interest and certainty, their determination of method. The study of psychology and pedagogy is, throughout, for the illumination and inspiration of teaching.

School Organization and Management.

These subjects are studied in a manner very like that described above. Observation and induction are the major portion of the process. The training school serves as the model of a school for children, the normal school as one for youth.

History of Education.

The aims in this course are: —

1. To discover the progress of educational theory and practice.
2. To discuss the aims, method and result of each.
3. To discuss the meaning and value of principles of education as evolved.
4. To find one's need of gaining inspiration from others.
5. To stimulate the desire to know the practice of other individuals and nations.
6. To liberalize, — foster the creative rather than the imitative spirit.

In the conduct of this course each pupil is provided with a brief compendium of the history of education as a foundation for his work; and a departmental pedagogical library is provided for reference use. Each pupil outlines the assigned topic for oral or written recitation, and free criticism follows. Frequent assignments of special subjects for investigation and report are made. Whenever feasible, educational theories and practices are illustrated in the conduct of the regular recitation.

School Laws of Massachusetts.

The purpose of this course is to make the students familiar with the principal powers, duties, and relations of teachers, pupils, and other parties directly concerned in school work as defined in the Public Statutes. To this end, brief consideration is given to law, — its relation to custom, as subsequent rather than precedent; its purpose,

in defining and unifying practice; its kinds, — permissive, compulsory and prohibitory. The more important laws are then analyzed; and the several powers and duties granted and forbidden to each of the parties finally summed up and classified.

Nature Study and Natural Science.

In the work in the natural sciences there is sought constantly the knowledge, the interest, the training needed by those who are to teach nature study and related subjects in elementary schools. Hence the aim is to cause the prospective teacher to possess and to be able to cultivate in others "what may be termed the elementary equivalent of the genuine scientific spirit, so that out of his native fondness for things about him shall come an enthusiastic truth-seeking, reverent attitude toward nature," an appreciation of the beauty, harmony and inviolability of nature's laws; together with some mastery of the means for subduing nature's forces and utilizing them for his own protection and development and for the social good.

Mineralogy. — Each student is assigned a place in the laboratory, and is provided with apparatus and type specimens (see Equipment, page 19).

He is taught to recognize and name a considerable number of minerals by practice in distinguishing their physical properties. A smaller number of the most common and useful minerals, with their varieties and the rocks in which they occur are studied in greater detail. Special stress is laid upon such as can be found in the neighborhood of the school, and upon the uses of mineral bodies for manufacturing, building and decorative purposes.

Students are led to see the value of such work in developing the power and the habit of close observation, critical comparison and nice discrimination; also in cultivating interest in common things, and utilizing the collecting instinct of children for their education.

A few chemical tests are taught, and other interesting correlations made with the study of chemistry going on at the same time.

Each student is assigned a topic for special research, the results of which are presented to the class. This gives training in the use of books and in the orderly arrangement of subject matter for teaching purposes. Each is required to make a collection of minerals and rocks of the region, and to illustrate the assigned topic; and field excursions to several interesting localities are made for this purpose.

Chemistry. — The following are some of the topics considered: nature of chemical change, oxygen, nitrogen, air, hydrogen, water, the forms of carbon, carbon dioxid, coal, illuminating gas, combustion and flame, foods, respiration, fermentation, manufacture of lime, iron and glass, acids, alkalies, salts.

Each student prepares simple apparatus and performs experiments, being guided to the proper interpretation of the observed results by printed questions and directions. Ability to use experiments in teaching is especially sought. Those who work faster or who have had the subject matter before are given extra exercises, adapted to their ability, to present before the rest of the class.

The laboratory work is followed by class discussions, and notes on each experiment are written, which are expected to be in good form, correct in English, and to cover the following points: —

1. Purpose of the experiment (topic to be illustrated).
2. Apparatus (what we use).
3. Experiment (what we do).
4. Results or observations (what we learn by the senses).
5. Inferences and explanations (what we learn by thinking, reading, etc.).
6. Applications (what things in every-day life, in nature, in other studies, the experiment may be used to teach or illustrate).

Special attention is given to the applications of experi-

ments in explaining the facts of common life, or of other studies, such as mineralogy, human physiology, and nature study. Visits are made to the gas works, a lime kiln, and an iron foundry.

Physics. — The aims and the method are the same as in chemistry. Portions of the subject are selected, which, it is thought, will be most useful to teachers in elementary schools, such as: pressure in water and air, with applications to city water systems, artesian wells, hydraulic press, specific gravity methods, barometer, pumps, siphon, breathing, etc.; nature, properties and states of matter; simple machines, and the conservation of energy; heat, and its manifold applications. In addition to the individual laboratory work, students perform assigned experiments before the class, and question their classmates about the results and their explanation. Having gained some knowledge of physical principles, some power to reason from effect to cause, some skill in experimentation and in questioning, and having learned how to study and to plan lessons, students conduct similar exercises (in other portions of the subject) in connection with other studies and in the training school.

The school is well supplied with apparatus; but special pains are taken to teach students to improvise, from such materials as may be gotten anywhere, inexpensive apparatus, which they may take into the schools to illustrate the simpler facts of physics, physical geography and human physiology.

The work is chiefly qualitative, but wherever possible computations based upon measurements made in the experimental work are the means of correlating physics and mathematics and of securing greater power in both.

Drawings or diagrams are required when they can be made to aid in the expression of conditions and results.

Botany. — Plants are studied as living, breathing, working beings, with structure adapted to their functions and their surroundings. Hence plant physiology is given a promi-

nent place and experiments are performed by members of the class to show how plants live and grow. The work is begun in the winter, with twigs and buds of trees in the hands of each pupil. These are put in water, and their development watched. Each student plants seeds of squash, bean, pea and corn, which are cared for in the laboratory, and the morphology of the seeds and seedlings is made out. Drawings, properly labelled, to illustrate gross structure, are asked for, which though they be diagrammatic, will not merely suggest but will express accurate conceptions of the real construction of the object represented.

The cycle of life-changes from seed to seed again is traced, such topics as the following being used: —

The conditions of germination.
Storage of food in seeds, etc.
Roots and root work.
Relations of plants to the soil.
Stems and their uses.
Buds and what they promise.
Leaf arrangement, with reference to light, air, water.
Food of plants, — how taken, how used.
Leaf structure and work.
Nature and uses of floral organs.
Fertilization, pollination and cross-pollination.
Fruits, and their uses to the plant.
Seed dispersal (what plants do for their young).
Relations between plants and animals.
Uses of plants to man and other animals.
How plants protect themselves.
The struggle for existence among plants.

One or more topics, with references to text-books and reference books, are assigned to each member of the class, who prepares an outline of the subject matter, collects material to illustrate the same, teaches or presents a portion of the subject to the rest of the class, and prepares a plan for teaching a similar lesson to children.

As the season allows, out-door excursions are taken, to

study plants alive and at home. The work is confined almost wholly to the higher plants, for lack of time and because microscopic work is considered to be neither suitable nor feasible for elementary schools. Prepared slides are shown by the compound microscope, or projected on the screen.

Zoölogy. — A series of typical animals is so studied as to make out their plans of structure and the adaptation of their structure to habits and surroundings. Related forms are compared with these, and some idea of classification is developed. Each student examines both live and preserved specimens, furnished by the school or collected by himself, being guided by definite directions and questions for thought. The facts observed are expressed by labelled drawings and by written statements.

The use that may be made of the material in giving animal lessons in elementary schools is constantly kept in mind. Hence such forms as are easily obtained in the interior are selected, and very little dissecting or microscopic work is required.

The work begins in the fall, with the study of insects, such as locusts and crickets, dragon flies, house flies, butterflies and moths, honey bees and wasps. Their life history is traced by means of a series of imported preparations, showing all stages from egg to adult (see "Equipment"), and also, as far as possible, by means of live specimens.

Other animals studied are the lobster, the spider, the centipede, the millipede, the earthworm, the fish, the frog and its development, common birds, and mammals.

Special topics are assigned for library work, lesson plans are prepared and teaching exercises conducted as in botany.

Physiology. — The course includes so much of anatomy as will make vivid the harmony between structure and function, so much of physiology as will emphasize the fundamental importance of the vital functions, and so much of personal hygiene as should be practised by one knowing his

body as a physical organism, the abode and instrument of his mind, and respectful of it because of its possibilities in use, strength and beauty.

The range of the subject is: The human body as a whole; its external and structural parts; general plan of the body; the general structure of the limbs and walls and the different systems of the body, — digestive, absorbent, circulatory, respiratory, secretory, excretory, osseous, muscular and nervous; their functions; the conditions of health. School hygiene, sanitation and emergency lessons receive proportional consideration, our own environment furnishing ample and proper illustrations. The kind of work is distinctly objective and practical.

Gymnastics. — Health of the individual is the chief and constant consideration. Physical culture is induced by seeking to attain ideals of physical vigor, coördination and grace, by means of volitional, formal exercises and spontaneous games, and the habit of physical expression of noble ideals. The Swedish system of gymnastics is taken as the basis. Adaptations to needs and interests of children, youth and adults are impressed vividly.

Instruction in the theory of gymnastics is correlated closely with the study of the human body as indicated under physiology. The physiological basis causes the importance of gymnastics as a need of personal health and as a feature of public school education to be acknowledged heartily, and leads to zealous action.

The gymnasiums are well ventilated and lighted, fully equipped, and conveniently adapted for formal exercises, games and athletics.

Geography.

Geography is knowledge of the earth as the home of man.

Elementary geography is knowledge of the appearance, activities, uses and distribution of geographical objects. This includes the three phases of work common to all studies: (1) the acquisition of ideas from the objects; (2) the expression of these ideas objectively (*e.g.*, by

modelling, showing similar objects), by drawing and by symbols; (3) the reading of models, pictures and symbols to recall and acquire ideas.

The main divisions of elementary geography are: —

Preliminary Study of Geographical Objects. — This work is properly a section of nature study, and is treated as such. It includes: (1) the observation, comparison, grouping and reasoning concerning local objects; (2) the expression of this knowledge by modelling, drawing and the use of symbols, especially *geographic symbols;* (3) the imagination of geographical objects and relations different from those at home, by the aid of pictures, text and conversation; (4) the reading of maps of his own locality, of distant regions, especially of those places of which he has seen pictures. In this phase of imaginative work much emphasis is given to thinking the appearance and activity of the objects represented; location is of secondary importance.

This preliminary study includes the different elements which enter into child life, — physical, biological and sociological. The elements most common in children's experience are the industrial and commercial, and caution is needed lest the teaching of the physical element receives undue emphasis. The physiographic conditions are but the basis of biological and sociological aspects.

The Earth a Whole. — It is the first presentation to the imagination of pupils of the simple world-wide views of the earth as the home of man. Each pupil is led to feel: —

1. That the earth is a whole, a unit, having qualities or powers as a whole differing from the qualities of its parts.

2. That each part, land, water, atmosphere and life, has its own qualities, differing from the qualities and powers of all other parts.

3. That the several parts and the whole are all *working* together to make the earth a home for man, and the means of his progress to better, nobler, higher life.

The Continents. — The order and purpose in the study of each continent are to: —

1. Find what part of the world ridge, of the world drainage, of the world climate, of the world productions, of the world races, each continent includes. This is review work.

2. Find such new or peculiar details of relief, drainage, climate, soil, productions and people as are necessary to understand and appreciate the work of the continent and its inhabitants in the development of the people of the continent.

3. Think the continent anew in its relation to the world ridge, yet with more completeness, in order to perceive more clearly the special use and influence of each continent in the development of the whole human race, and to emphasize the interdependence of continents and of people.

Especially the dependence of all life forms on geographic conditions is made prominent. So, too, the influences of past and present physiographic phenomena are noted.

The Leading Nations. — The people, not the territory, are the central thought. The territory is the place of past and present activities. The relations of the geographical objects in such a territory as used and modified by man in his progress are essentially historical. Hence geography and history are inseparable in this division of the subject. The general order of thought and the aim in the study of the nations is to: (1) trace briefly their past progress; (2) find the natural advantages or disadvantages of geographic conditions; (3) find intentional use made of geographic conditions to facilitate progress; (4) ascertain with considerable fulness their present status and progress; (5) discern international relations and their effects; (6) measure their respective usefulness to mankind.

The State and its Neighbors. — The study of the State is not to follow the study of nations, but from the beginning and at every stage of the course such facts as pertain to the State are culled and emphasized. At the end of the course the geography and history of the State are reviewed with great care. The teaching of the geographic conditions of the territory of the State, of the past and present usefulness of her citizens and of the opportunities to be grasped,

arouses in every pupil such a love of country, such a pride in the State as stirs him to make her more glorious even in the future than in the past.

The City or Town. — The current thought is as for the study of the State. Local geography and local history are inseparable. The past and present place and usefulness of the city or town in any or all the relations of life are taught, with the purpose of making every child an interested, intelligent, active citizen.

Trips. — Nature and man have very materially added to our sources for study in this vicinity. Erosion, including the formation of limestone gorges, caverns, sinks and a natural bridge, and other forms of water action in stream and pond, are abundantly illustrated; glacial smoothing, scratching and deposition are prominent; and the processes of mountain building and destruction are easily demonstrable.

The industries of our manufacturing region are unusually varied, and afford admirable basis for industrial, commercial and social conditions.

In order to realize these opportunities, over fifteen trips have been made by the class during the past year. About half of these occurred during school hours, and were required; the remainder, mostly Saturday excursions, have been voluntary and well attended. None were made exclusively geographical, but features of biological, physical, geological, historical, governmental and literary interest were carefully observed and discussed. The scope of observation is indicated by this list of places visited: Adams (South Hoosac) valley; Beaver (North Hoosac) valley; natural bridge; Greylock foot-hills and cascade; Greylock; cotton, woolen, paper, grain mills; Arnold Print Works; shoe shop; newspaper office; cutlery works (Turner's Falls), Deerfield and Connecticut valleys, Deerfield, Concord, Lexington, Cambridge, Boston and Plymouth in 1900; New York, Philadelphia and Washington in 1901.

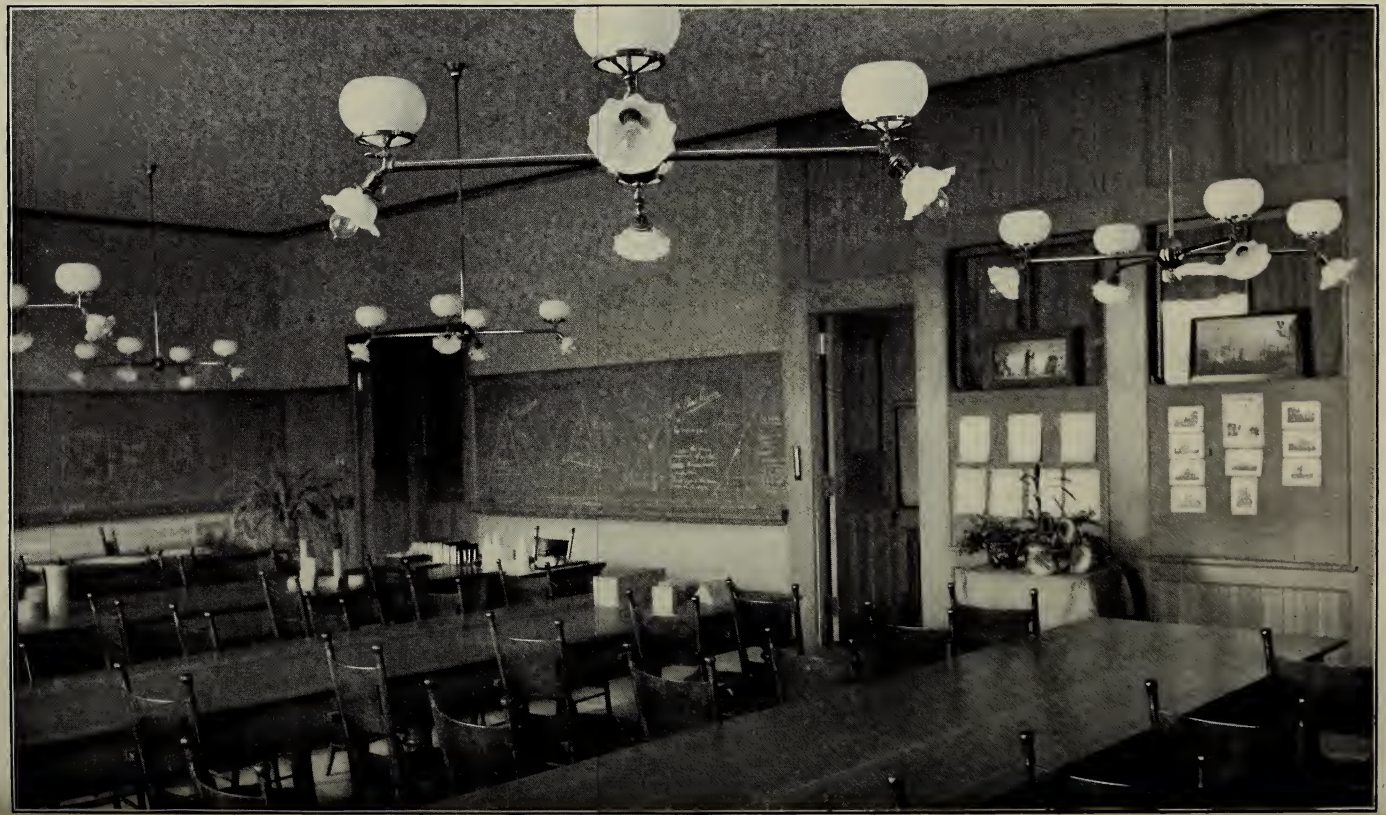
History.

This course includes a study of English and United States history and the principles of civil government. Eight text-books are issued to each pupil during the course and his use of these is guided by a topical outline and by references from the instructor. These are supplemented by a large departmental library and a series of charts and maps.

The aims in the course are as follows: —

1. To find that history means development.
2. To find that knowledge of history is not a knowledge of facts but of relations.
3. To show the value of the law of cause and effect in history.
4. To find relation of historical development to geographical environment.
5. To learn of the development of the people, and institutions with which our country began.
6. To see the evolution in our own country's history through the stages (aboriginal, discovery, settlement, contest, revolution, national growth, slavery and development), with their accompanying social, political and religious life.
7. To develop patriotism and interest in present-day affairs (contemporary problems).
8. At all parts of the course to find from our own mental activity the ways of teaching each period; and to find the proper use of pictures, maps and books.
9. To see the peculiar value of history among school subjects of developing patriotism, hero worship and the social instincts.

The conduct of the course begins with a brief study of the periods in the development of English history; the printed outline guides the reading, points out the relations; individual reflection is stimulated by pointed questions. This is followed by study of periods in United States history; while no one of these is studied exhaustively, type lessons



are given and lesson plans and teaching exercises are submitted by the pupils. The principles of town, city, county, State and national government are introduced as they developed historically; they are made real by visits to State or city elections, and by town and city reports. Weekly discussion of current events and present-day problems lends interest and enforces the thought that history is a living, growing subject.

The work of the past year has been supplemented further by voluntary trips to the historical collections in North Adams, to old Deerfield, and Concord, Lexington, Cambridge, Boston and Plymouth.

Mathematics.

Geometry. — The scope of the work is: (1) geometric magnitudes, illustrated by models; (2) relations, measurements, drawings, descriptions, definitions; (3) study of plane figures and discovery of theorems; (4) study of solids, discovery of theorems, measurements (according to time); (5) objective and mathematical demonstration; (6) occurrence of geometric forms in nature, art and architecture; (7) conception of the geometric magnitudes as real, non-material, accompanying all preceding steps.

Algebra. — The scope of the work is: (1) generalizations leading to laws of number, as exemplified in six fundamental processes, — addition and subtraction, multiplication and division, involution and evolution: (2) use of axioms in solving of equations, simple and quadratic; (3) deducing of formulas, their interpretation and application as in factoring, transformation of fractions, binomial theorem, etc.

Arithmetic. — The scope of the work is: (1) number, as applied to measured quantity, as length, area, volume, capacity, weight, money values, time, etc.; (2) consideration of objects adapted to number teaching; (3) drawing, cutting, building, to find and illustrate values in relation to unit of quantities, in relation to each other; (4) six funda-

mental processes (see algebra), laws of number as used in each; (5) application of processes in mensuration, proportion, forms of percentage, etc.; (6) applications to actual conditions of life, — industrial, commercial, governmental, social.

English.

The general aim of the work in the department of English is so to acquaint the student with the many forms of English expression as to impress him with the importance of the teaching of English. Study of the student's personal experience in learning and that of children in the grades is made the basis of all study of methods. The course comprises language, grammar, literature and reading. The subjects are correlated as much as possible.

Language. — The order of teaching is: (1) the significance of language; (2) what it includes; (3) the various means by which the language power and knowledge of the child are increased in the lower grades; (4) the methods and values of the forms of teaching, together with devices. Stress is laid upon story-telling, the use of pictures, letter-writing and the principles of composition. Constant practice by the student in the doing and teaching of these things is required.

Grammar. — The study of scientific grammar is pursued for its disciplinary value to the student, — for the purpose of training the mind into thinking abstract relations. The discovery of a logical order in the teaching is made, and from the knowledge thus gained elementary grammar is directly derived by the student.

Literature. — The value of literature as one of the most important factors in spiritual education is emphasized. Sympathetic and appreciative rather than critical study is made of some of the masterpieces of both British and American literature, primarily for the sake of general culture. Certain guiding principles of the art are discovered and applied, and comparisons made for the training of the judgment and the formation of ideals. Children's literature is

explored to some extent, and such a study of books, commonly recommended, made as will help to make the student a trustworthy guide.

Reading. — Such a study of a piece of literature is made as will tend to bring the author and the student into unity in the one emotional experience. Means of accomplishing this with children of different grades and by pieces of varying complexity are considered. Mechanical perfection of the voice is made subordinate, and is taught as a means of revealing the inner life. Reading is thus found to be the important test of the intellectual and spiritual appreciation of literature.

Latin.

This course is provided for special and graduate students, to prepare them as teachers of Latin for the upper grammar grades.

The constant aim in the course is to treat Latin as idiomatic expression of thought rather than an arbitrary combination of words; that it differs from English as the thought processes differ in addition to the differences of inflection. The method of work from the first is shown by these principles: —

1. Thought units — sentences — should be dealt with from the first.

2. Thoughts should be understood, through eye and ear, before reproduction of any sort is attempted.

3. Reproduction, or retranslation into Latin, should be in every respect accurately done, orally and in writing.

4. Frequent repetition and retranslation are necessary for fixing right forms of expression and as a step toward thinking in the language.

5. Variations from the exact forms studied may be gradually introduced, in a conversational way, as a step toward Latin composition.

6. Original Latin should not be allowed until late in the course, and then only such as is similar in style to that previously studied.

7. Grammar and syntax should be studied from the language itself. This inductive principle is not pushed to the extreme of requiring pupils to discover everything anew, but the forms and uses are apprehended before they are described.

The pedagogical reasons for these principles are found by discussing the ways in which a child acquires the mother tongue and any modern foreign language, and by comparing the powers of the adult with those of the child and the objects of modern with those of ancient language study.

As soon as it is feasible, the reading of a Latin text is begun. Oral reading and memorization are made prominent, in order to cultivate the feeling of the Latin as an expression of thought and the perception of style. Careful attention is given to discussing the selection of text-books, and the adaptation of class recitations to individual needs.

Drawing.

The purpose of our art study is to consider the principles governing good art, to study and enjoy examples of art embodying these principles, to give an appreciation of harmonious coloring, and to feel the connection existing between the arts, music, literature and painting, realizing that all are governed by the same general principles. Students should be alive to see and enjoy whatever is beautiful in the world about them and in their own work to realize that "art is simply doing whatever one has to do in the best possible way."

The class work is grouped under the following heads: Appearance, — perspective elements, pictorial drawing (single objects, grouping and composition). Structure, — elements of form, elements of beauty, structural design. Enrichment, — color, elements of ornament, decorative design.

An abbreviated course in the history of art is carried on, parallel with these subjects, and the pupils are encouraged to have art albums for reproductions of the world's best examples of architecture, ornament, sculpture and painting.

The pupils use the following mediums of expression: watercolor, pencil, charcoal and blackboard crayon. Blackboard illustrative work from memory along all lines of work studied is a prominent feature of the course.

Music.

Tone perception: listening to voice and piano; scale tones and exercises by imitation; writing from oral dictation.

Tone production: securing softness, sweetness, purity of tone; developing appreciation of beauty of tone; study of child voice.

Sight reading: daily practice in music; thinking, silent and oral reading.

Analysis of form: developing understanding and appreciation of musical form; most important forms analyzed; illustration by voice and piano; application in appropriate phrasing, etc., in oral work.

Melody: laws illustrated; study of melodies from the symphonies, sonatas, oratorios, operas, and of the best songs; writing of original melodies; study of children's songs, with reference to selection for school use.

History: lives of eminent composers; illustrations, vocal and instrumental, to gain familiarity with types and cultivate taste for music.

Interpretation: piano playing for pupils once a week in normal school and training school; explanations of graded selections, beginning with Schumann's "Scenes from Childhood," Gurlitt's "Album for the Young," Mendelssohn's "Songs without Words."

Chorus work: practice twice a week in chorus reading; a musical program given at Thanksgiving, Christmas, Easter, and on patriotic days.

Glee club: practice twice a week; two concerts given in the year; singing for pupils in training school.

Piano music: the collection includes works by eminent composers, graded from such works as mentioned under Interpretation, and progressing in difficulty to Beethoven's

sonatas and Bach's fugues. These are kept near the piano for the use of students. A duplicate collection is in use in the training school.

Manual Training.

The term manual training means educational handwork, — the cultivation of the hand to express the ideas of the mind. The aim is the development of the individual through self-activity in manual expression. The work in the training school consists of designing, modelling in clay, carving and simple construction, as the ability of the pupil permits. The problems increase in difficulty as the individual gains in ability, the purpose throughout being, so far as circumstances permit, to suit the work to the needs of the individual. Relative difficulty and interest are considered important factors. The normal students follow, as far as time permits, the line of work indicated for the training school, the object of the work not being to prepare teachers of manual training, nor to furnish an adequate course for individuals, in whose previous education hand training has not played an important part, but rather to demonstrate the value, and lead students to appreciate the importance, of handwork as an active factor in early education, and to prepare certain pieces of apparatus for teaching purposes.

TRAINING SCHOOL.

On an adjacent lot is a modern brick building, containing seventeen class rooms, an assembly hall, two large basements and the motor and boiler rooms. In an annex is the gymnasium, forty by seventy-two feet, supplied with Swedish apparatus sufficient for the accommodation of classes of forty pupils each. All grades are represented, beginning with the kindergarten and extending through nine years of primary and grammar work to the high school. In each room is a regular teacher in charge of a class not exceeding forty pupils. The principal is free for teaching in any

grade, and for the direct observation and instruction of the normal students.

Unusual opportunities are afforded for the study of children and the practice of teaching. Students begin their work in this school immediately upon their entrance into the normal school, and continue it regularly throughout the course. The rapidity of progress through the various stages of the training school work depends on the ability and previous experience of the student. In general the order of work is as follows: —

First Year. — First term: reading of individual children and of groups begun. Second term: observation of teaching and control emphasized.

Second Year. — Third term: study of school organization and management, and assisting in teaching and management. Fourth term: practice in teaching, the amount of responsibility conferred depending on the ability of the student.

Third Year. — Responsible charge of classes, elective work. Students who have taught successfully before entering are given opportunities for practice in teaching and disciplining as early in the course as their abilities warrant.

Close and appropriate supervision and instruction are given students by the regular teachers of the several grades and by the principals of the various departments, thus ensuring reasonable progress to students requiring extra opportunities in the practice work of teaching.

In the kindergarten department which occupies a suite of three rooms, which can be opened into one, students not only are trained to be kindergartners, but also are taught the importance of and the ways of continuing the kindergarten spirit into primary work. They observe and practise in the early primary grades, and are fitted thus to become kindergarten or primary teachers in the public schools as they may elect. The demand for such teachers is very far beyond the supply.

STUDENTS

Graduate Students

Minnie Alice Burghardt	Pittsfield
Clara Virginia Cady	North Adams

Senior Class

Frank Merritt Rich	North Adams
Lina May Tillotson *	Lenox
Lottie Martha Bradford	Egremont (South)
Eleanor Hayward Brown	Great Barrington †
Mary Newcomb Brown	Greenfield
Ethel May Burt	Pittsfield
Margaret Veronica Carey	Sheffield
Elsie Anna Case	East Arlington, Vt.
Faith Gertrude Chase	Cheshire
Effie Caroline Clark	Pittsfield
Katharine Collins	North Adams
Frances Gertrude Conlon	North Adams
Mabel Robinson Coombs	Colrain
Adeline Cousins Damon	Pittsfield
Helen Morgan Davison	Pittsfield
Grace Louise Donelson	Colrain
Ida May Foote	Adams
Daisy Elizabeth Hicks	Adams
Anna Elizabeth Kaley	Hinsdale
Elizabeth Mary Lyman	Huntington
Florence Agnes McSweeny	Pittsfield
Agnes Eugenia Miner	North Adams
Mary Elizabeth Mowry	Leyden
Nellie Ann Pendlebury	Great Barrington †
Mary Ellen Russell	Adams
Mary Magdalen Ryan	North Adams
Mary Sever Sparks ‡	Lee
Sylvia Louise Williams	Haverhill
Madeline Eunice Portia Wood	Greenfield

* Entered February, 1899; graduated February, 1901. † Housatonic.
‡ Entered February, 1900.

KINDERGARTEN COURSE

Bessie Sherwood Barnes	Pittsfield
Helen Adaline Browne	North Adams
Florence Adelina Walbridge	Bennington, Vt.

(Graduated February, 1901.)

Mabel Idora Adams	Charlemont
Gertrude Edna Billings	North Adams
Cecille Mabelle Bowden *	Miles City, Mon.
Gertrude Jane Orr	North Adams
Agnes Laura Spooner	Williamstown

JUNIOR CLASS

Mary Agnes Behan	Pittsfield
Fairhope Leslie Burdeck	Williamstown
Mary Theresa Carpenter	Readsboro', Vt.
Mary Elizabeth Conlon	North Adams
Nellie Frances Curley	North Adams
Clara Elizabeth Dalton	North Adams
May Theresa Donovan	Cheshire
Nellie May Easland	Pittsfield
Maud Valona Elmer	Shelburne Falls
Esther Erskine	North Adams
Myrtle Newcomb Fake	North Adams
Mary Elizabeth Glynn	Falmouth
Isabella Haddow	North Adams
Mary Frances Haddow	North Adams
Lou Harmon †	Hawley
Laura Henwood	North Adams
Flora Elizabeth Hollis	Windsor ‡
Annie Elizabeth Kelley	North Adams
Rose Emma Lyons	Pittsfield
Jessie Adaline Manning	North Adams
Elizabeth Fleming W. McGowan	North Adams
Mary Genevieve Molloy	North Adams
Lillian Munson	Ashley Falls
Anna Loretta Murphy	Hinsdale
Mary Louise Perley	Greenfield
Nellie Maria Ponch	Greenfield §
Marion Agnes Catherine Somers	Adams
Alice Marilla Southwick	Buckland
Sophia Cochran Stocking	Williamstown

* Entered February, 1900.
† Entered February, 1901.
‡ P. O. West Cummington.
§ P. O. Turner's Falls.

Mabel Alberta Tower	North Adams
Mae Manola Tyler	North Adams
Annie Theresa Udell	North Adams
Margaret Grace Walsh	Pittsfield
Ruby Electa White	Windsor
Florence Negus Young	Charlemont

KINDERGARTEN

Dorothy Elizabeth Davies	North Adams *
Minnie Sophia Hunter	Williamstown
Blanche Evelyn Tandy	Newport, N. H.
Hazel Tusler	St. Paul, Minn.
Ella Louise Washburn	North Adams *

SPECIAL STUDENTS

Minnie Chapel,	Becket
Ada May Congdon	New Lenox
Maude A. Doolittle	Princeton
Mabel Agnes Hennessey	Dalton
Frances M. Kennedy	Washington
Genenia Maud Kimball	Hartford, Conn.
Helen Agnes Knapp	Cummington †
Italia May McElwain,	Middlefield
Alice A. Nash	Middlefield
Sarah M. Read	Florida ‡
Anna Gurney Sears	Plainfield
Edna Campbell Skinner	Princeton
Lucy Clarke Thayer	Hadley
Lucy M. Ware	Shelburne Falls

SUMMARY

Graduate students		2
Senior class: —		
Regular course	29	
Kindergarten course	8	
	——	37
Junior class: —		
Regular course	35	
Kindergarten course	5	
	——	40
Special students		14
Total		94

* Blackinton. † P. O. Worthington.

‡ P. O. Hoosac Tunnel.

NORTH ADAMS NORMAL SCHOOL

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Catalog

1903

Greylock, cloud-girdled, from his mountain throne,
A voice of welcome sends;
And, from green summer fields, a warbling tone,
The Housatonic blends.

Frances Ann Kreble.

Spirit of Beauty! Let thy graces blend
With loveliest nature all that art can lend.

* * * * * * *

Come from the steeps where look majestic forth
From their twin thrones, the giants of the north
On the huge shapes that, crouching at their knees,
Stretch their broad shoulders, rough with shaggy trees.
Through the wide waste of ether, not in vain,
Their softened gaze shall reach our distant plain.

Oliver Wendell Holmes.

STATE NORMAL SCHOOL

AT

NORTH ADAMS, MASS.

Established June, 1894

CIRCULAR AND CATALOG

FOR YEAR ENDING JUNE 30, 1903

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Established 1837

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Mary G. Molloy, *Assistant in First Grade*
Laura Henwood, *Assistant in First Grade*

Eva L. McConkey, *Principal of Kindergarten Department*
Lilian S. Daniels, *Assistant* Annie Boyd, *Pianist*

CALENDAR

1903

Graduation

Tuesday, June 23.

First Entrance Examination

Thursday and Friday, June 25 and 26, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 8 and 9, at 9 A.M.

School Year Begins

Training School, Monday, September 7.
Normal School, Thursday, September 10, at 9 A.M.

Thanksgiving Recess

Begins Tuesday night, November 24. Ends Monday night, November 30.

Christmas Recess

Begins Wednesday night, December 23. Ends Monday night, January 4.

1904

Second Term Begins

Monday, February 1.

Spring Recess

Begins Friday night, March 25. Ends Monday night, April 4.

Graduation

Tuesday, June 21.

First Entrance Examination

Thursday and Friday, June 23 and 24, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 6 and 7, at 9 A.M.

Thanksgiving Recess

Begins Tuesday night, November 22. Ends Monday night, November 28.

Christmas Recess

Begins Thursday night, December 21. Ends Monday night, January 2.

Sessions are from 9 A.M. to 12 M., and 1.30 P.M. to 4 P.M. Saturday sessions are omitted.

Entrance examinations on the dates given above begin at 9 o'clock A.M., in the assembly hall. Candidates are to be present at the opening and on both days. They should come prepared to stay in September, as the term begins on the following day.

For information about the school address the principal at North Adams.

State Normal School

AT NORTH ADAMS, MASS.

LOCATION

North Adams is distinctively picturesque. The elevations that surround the city are among the most attractive of the Berkshire hills. On the north side are rounded domes of the Green Mountains, on the east the abrupt wall of Hoosac Mountain overhangs the city, while on the south-west border rise the outlines of massive Greylock, the highest peak in Massachusetts.

On the westerly slope of an eminence rising several hundred feet above the river are situated the school buildings. Of the many beautiful locations in Berkshire County, the one chosen is remarkably fine. The near rounded domes, the deep retreating valleys, the winding streams, with all their changing life and aspects, always please and inspire. The noisy hum of the city slightly removed, the beauties of nature close at hand, the duties of student life are made easy and profitable to an unusual degree. The city of North Adams was both wise and generous in its gift of a location. Especially noteworthy are the facilities for out-door study of nature and of industry.

The city is easily reached from the east and west by the Fitchburg Railroad, from the south by the Boston & Albany road. Electric cars connect the city with Williamstown, Adams, and other towns to the south.

BUILDINGS

The school building, the dormitory, and the principal's house in exterior are of yellow brick and white marble, with metal roofs. The school building, in Italian style,

is one hundred and fifty-two feet long, eighty-four feet deep, and three stories and basement in height. It is of slow burning construction, the floor timbering and roof being carried with steel beams and trusses. The arrangement of stairways, which are iron, gives easy and safe egress.

In the basement are the boiler, engine, fuel, heating, and repair rooms, a lunch room, a room for manual training, and a photographic dark room; in the first story, two reception rooms, cloak, coat, and toilet rooms, and four natural science laboratories; in the second story, the assembly hall, office, libraries, and class rooms for the languages and mathematics; in the third story, the physical and chemical laboratories, the art rooms, and a general class room; and in the attic is ample space for storage.

The interior is finished in oak throughout and provided with modern improvements and facilities. Cabinets, drawers, closets, specially adapted to the needs of the school, are provided in all the rooms. In strength, simplicity, beauty, and adaptation to its use the school building is not surpassed.

REQUIREMENTS FOR ADMISSION

Candidates for admission to any one of the normal schools must, if young women, have attained the age of sixteen years, and if young men, the age of seventeen years. Their fitness for admission will be determined: —

1 By their standing in a physical examination.
2 By their moral character.
3 By their high school record.
4 By a written examination.
5 By an oral examination.

Physical Examination

The State Board of Education adopted the following vote March 7, 1901: —

That the visitors of the several normal schools be authorized and directed to provide for a physical examination of candidates for admission to the normal schools, in order to determine whether

they are free from any disease or infirmity which would unfit them for the office of teacher, and also to examine any student at any time in the course, to determine whether his physical condition is such as to warrant his continuance in the school.

Moral Character

Candidates must present certificates of good moral character. In deciding whether they shall prepare themselves to become teachers, candidates should note that the vocation requires more than mere freedom from disqualifying defects; it demands virtues of a positive sort that shall make their impress for good upon those who are taught

High School Record

It may be said, in general, that if the ordinary work of a good statutory high school is well done, candidates should have no difficulty in meeting the academic tests to which they may be subjected. *They cannot be too earnestly urged, however, to avail themselves of the best high school facilities attainable in a four years' course, even though they should pursue studies to an extent not insisted on, or take studies not prescribed, in the admission requirements.*

The importance of a good record in the high school cannot be overestimated. *Principals are requested to furnish the normal schools with records of the high school standing of candidates.* The stronger the evidence of character, scholarship, and promise, of whatever kind, candidates bring, especially from schools of high reputation and from teachers of good judgment and fearless expression, the greater confidence they may have in guarding themselves against the contingencies of an examination and of satisfying the examiners as to their fitness.

Written Examination

The examinations will embrace papers on the following groups of subjects, a single paper with a maximum time allowance of two hours to cover each of groups I, II, and

IV, and a single paper with a maximum time allowance of one hour to cover each of groups III and V (*five papers with a maximum time allowance of eight hours*) : —

I *Language* — (*a*) English, with its grammar and literature, and (*b*) either Latin or French.

II *Mathematics* — (*a*) The elements of algebra and (*b*) the elements of plane geometry.

III *United States History* — The history and civil government of Massachusetts and the United States, with related geography and so much of English history as is directly contributory to a knowledge of United States history.

IV *Science* — (*a*) Physiology and hygiene and (*b* and *c*) any two of the following: physics, chemistry, physical geography, and botany, provided one of the two selected is either physics or chemistry.

V *Drawing and Music* — (*a*) Elementary, mechanical and free-hand drawing, with any one of the topics, — form, color, and arrangement, and (*b*) music.

Oral Examination

Each candidate will be required to read aloud in the presence of the examiners. He will also be questioned orally either upon some of the foregoing subjects or upon other matters within his experience, in order that the examiners may gain some impression about his personal characteristics and his use of language, as well as give him an opportunity to furnish any evidences of qualification that might not otherwise become known to them.

General Requirement in English for All Examinations

No candidates will be accepted whose written English is notably deficient in clear and accurate expression, spelling, punctuation, idiom, or division of paragraphs, or whose spoken English exhibits faults so serious as to make it inexpedient for the normal school to attempt their correction.

The candidate's English, therefore, in all oral and written examinations will be subject to the requirements implied in the statement here made, and marked accordingly.

Special Directions for the Written Examinations

I Language

(*a*) *English* — The subjects for the examination in English will be the same as those agreed upon by the colleges and high technical schools of New England and now quite generally adopted throughout the United States.

1 *Reading and Practice* — A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter and spirit of the books, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of a few topics to be chosen by the candidate from a considerable number set before him in the examination paper. In place of a part or the whole of this test, the candidate may present an exercise book, *properly certified by his instructor*, containing compositions or other written work done in connection with the reading of the books.

The books set for this part of the examination are: —

1903–1905 — Shakespeare's *The Merchant of Venice* and *Julius Cæsar; The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner;* Carlyle's *Essay on Burns.*

2 *Study and Practice* — This part of the examination presupposes a more careful study of each of the works named below. The examination will be upon subject-matter, form, and structure.

In addition, the candidate may be required to answer questions involving the essentials of English grammar, and

questions on the leading facts in those periods of English literary history to which the prescribed works belong. The books set for this part of the examination will be: —

1903–1905 — Shakespeare's *Macbeth;* Milton's *Lycidas*, *Comus*, *L'Allegro*, and *Il Penseroso;* Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

(*b*) *Either Latin or French* — The translation at sight of simple prose or verse, with questions on the usual forms and ordinary constructions, and the writing of simple prose based in part or in full on the passage selected.

The Conference on Uniform Requirements in English for Admission to College, on whose recommendations the foregoing lists of books in English and directions for study are based, advises —

1 That English be studied throughout the primary and secondary school courses, and, when possible, for at least three periods a week during the four years of the high school course.

2 That the prescribed books be regarded as a basis for such wider courses of English study as the schools may arrange for themselves.

3 That, where careful instruction in idiomatic English translation is not given, supplementary work to secure an equivalent training in diction and in sentence structure be offered throughout the high school course.

4 That a certain amount of outside reading, chiefly of poetry, fiction, biography, and history, be encouraged throughout the entire school course.

5 That definite instruction be given in the choice of words, in the structure of sentences and of paragraphs, and in the simple forms of narration, description, exposition, and argument. Such instruction should begin early in the high school course.

6 That systematic training in speaking and writing English be given throughout the entire school course. That, in the high school, subjects for compositions be taken partly from the prescribed books and partly from the students' own thought and experience.

7 That each of the books prescribed for study be taught with reference to (*a*) the language, including the meaning of the words

and sentences, the important qualities of style, and the important allusions; (*b*) the plan of the work, *i.e.*, its structure and method; and (*c*) the place of the work in literary history, the circumstances of its production, and the life of its author. That all details be studied, not as ends in themselves, but as means to a comprehension of the whole.

II Mathematics

(*a*) The elements of algebra through affected quadratic equations.

(*b*) The elements of plane geometry.

While there is no formal examination in arithmetic, the importance of a practical working acquaintance with its principles and processes cannot be too strongly emphasized. The candidate's proficiency in this subject will be incidentally tested in its applications to other subjects.

In geometry, the candidate's preparatory study should include independent solutions and demonstrations, — work that shall throw him upon his own resources; and his ability to do such work will be tested in the examination. An acquaintance with typical solid forms is also important, — enough, at least, to enable the candidate to name and define them and to recognize the relations borne to them by the lines, planes, angles, and figures of plane geometry.

III United States History

Any school text-book on United States history will enable candidates to meet this requirement, provided they study enough of geography to illumine the history, and make themselves familiar with the grander features of government in Massachusetts and the United States. Collateral reading in United States history is strongly advised; also in English history, so far as this history bears conspicuously on that of the United States.

IV Science

(*a*) *Physiology and Hygiene* — The chief elementary facts of anatomy, the general functions of the various organs, the more obvious rules of health, and the more striking effects

of alcoholic drinks, narcotics, and stimulants upon those addicted to their use.

(*b* and *c*) *Any Two of the Following Sciences, — Physics, Chemistry, Botany, Physical Geography, provided One of the Two is either Physics or Chemistry* — The chief elementary facts of the subjects selected, so far as they may be presented in the courses usually devoted to them in good high schools. It will be a distinct advantage to the candidate if his preparation includes a certain amount of individual laboratory work.

A laboratory notebook, with the teacher's endorsement that it is a true record of the candidate's work, will be accepted as partial evidence of attainments in the science with which it deals. The original record should be so well kept as to make copying unnecessary.

V Drawing and Music

(*a*) *Drawing* — Mechanical and free-hand drawing, — enough to enable the candidate to draw a simple object, like a box or a pyramid or a cylinder, with plan and elevation to scale, and to make a free-hand sketch of the same in perspective. Also any one of the three topics, — form, color, and arrangement.

(*b*) *Music* — Such elementary facts as an instructor should know in teaching singing in the schools, including major and minor keys, simple two, three, four, and six part measures, the fractional divisions of the pulse or beat, the chromatic scale, the right use of the foregoing elements in practice, and the translation into musical notation of simple melodies or of time phrases sung or played.

Importance of Adequate Preparation

Candidates should measure their duty of making adequate preparation not wholly by the subjects selected and the papers set for the admission examinations, but by the larger demands their chosen vocation is sure to make upon them. The more generous and thorough, therefore, the preparation of the candidate, the greater the likelihood of profiting by

the normal school, of completing the elementary course on time, of securing employment after graduation, and of doing creditable work as a teacher.

The candidate is advised, therefore, to utilize all feasible opportunities offered by the regular high school course for promoting this breadth of preparation, and the high school should aim to hold the candidate up to the higher ideals of such preparation.

Equivalents

Reasonable allowance in equivalents will be made in case a candidate, for satisfactory reasons, has not taken a study named for examination. Successful experience in teaching will be taken into account in the determination of equivalents.

Division of the Examinations

Candidates may be admitted to preliminary examinations a year in advance of their final examinations, provided they offer themselves in one or more of the following groups, each group to be presented in full : —

II Mathematics
III United States History
IV Science
V Drawing and Music

Preliminary examinations can be taken in June only.

Every candidate for a preliminary examination must present a certificate of preparation in the group or groups chosen, or in the subjects thereof, the form of certificate to be substantially as follows : —

_____ has been a pupil in the _____ School for _____ years, and is, in my judgment, prepared to pass the normal school preliminary examination in the following group or groups of subjects and the divisions thereof : —

_____

_____

Signature of principal or teacher, _____

Address, _____

The group known as I Language must be reserved for the final examinations. It will doubtless be found generally advisable in practice that the group known as IV Science should also be so reserved.

While division of the final or complete examinations between June and September is permissible, it is important both for the normal school and for the candidate that the work laid out for the September examinations, which so closely precede the opening of the normal schools, shall be kept down to a minimum. Candidates for the final or complete examinations are earnestly advised, therefore, to present themselves in June.

TIMES OF EXAMINATION AND ADMISSION

Examinations for admission to the normal schools are held at the close of the school year in June, and also at the beginning of the school year in September, as stated in the calendar. Candidates are advised to present themselves at the first examination.

New classes are admitted to the normal schools at the beginning of the fall term. Candidates should come in September prepared to stay, as regular work begins on the day following the examinations. In exceptional cases admissions to classes already formed are allowed at the beginning of the second term.

COURSES

Elementary Course

The elementary course of study is designed primarily for those who aim to teach in the public schools below the high school grade. It comprises substantially the following subjects: —

I The study of the educational values of the following subjects and of the principles and methods of teaching them: —

(*a*) English, — reading, oral and written composition, grammar, rhetoric, English and American literature.

(*b*) Mathematics, — arithmetic and bookkeeping, algebra, plane geometry.

(*c*) History, — history and civil polity of the United States and of Massachusetts.

(*d*) Science, — physics, chemistry, mineralogy, botany, zoölogy, geography, physiology and hygiene.

(*e*) Drawing, vocal music, physical training, manual training.

II (*a*) The study of man, body and mind, for the principles of education; the study of the application of these principles in school organization, school government, and in the art of teaching; the history of education; the school laws of Massachusetts.

(*b*) Observation and practice.

The time required for the completion of this course depends upon the students. It may not exceed two years for those of satisfactory preparation and superior ability; for others, three years are needed to do the work properly. In many cases more than two years are insisted upon. A diploma is given when the course is satisfactorily completed.

A Third Year for Practice and Study

The board of visitors and the principal of any normal school may arrange for its students a third year of study and of practice in teaching whenever, in their judgment, such action is desirable. The object is a more complete mastery of the topics arranged for the regular two years' course, as well as further experience in teaching.

For students signifying at their admission their intention of pursuing a three years' course, it will be arranged so that elective subjects may be begun early in the course, instead of being postponed to the third year.

The Kindergarten Primary Course

The principles which control kindergarten instruction apply not alone to children of three or four years but as well to the whole phase of early childhood, the period extending

from two or three to seven or eight years of age. Kindergarten and primary instruction differentiate not in principle, not in general method, but in adaptation of ways and means to the tendencies and growing powers prominent at that period. The process is continuous, the objects studied vary, constructive power widens in application, the use of symbols becomes increasingly prominent. The course as planned and practised trains teachers to work in the kindergarten with due regard to succeeding years of growth of children and in the primary grade with due regard to previous training and later growth. For such teachers the demand far exceeds the supply.

The kindergarten primary course is a modification of the elementary course (see page 16) and requires two years at least for completion. The greater portion of the practice teaching may be done in the primary or kindergarten grades as the student may choose.

To enable students to become competent principals of kindergartens a third year of advanced kindergarten study and responsible control has been arranged. Different children attend the afternoon kindergarten and their instruction is given into the charge of graduate students of ability, under the general supervision of the principal of the department. Similar facilities are afforded for study and practice in the first grade primaries. Graduate students of marked ability are paid a small salary, sufficient to pay living expenses, during the third year. A special diploma is given to students completing satisfactorily the graduate course.

The conditions of admission are the same as for the elementary course. In addition, there should be some facility in playing the piano and singing, if the better positions are to be secured. Students pay the cost of material taken away, but this expense does not exceed ten dollars for the course.

For further details see page 40.

Special Courses for Teachers

Teachers of several years of successful experience in teaching, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal and of the board of visitors, select a course (including the course in psychology and pedagogy), and when such course is successfully completed they shall receive certificates for the same. Candidates are admitted to this course without written examination.

Teachers desirous of spending their vacations at the school are invited cordially to come at any time. Observation work, study of elected subjects, or participation in regular course work and preparation of teaching material, are offered in all departments of the normal and training school. There will be afforded every facility for study, the work being adapted to the wishes and capabilities of applicants, in so far as the permanent needs of the school permit. For subjects see page 24.

Special Course for College Graduates

Graduates of colleges and universities, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal of the school and of the board of visitors, select from the above curriculum of study a course which may be completed in one year, and when such course is successfully completed they shall receive a certificate for the same. Candidates are admitted to this course without written examination.

EQUIPMENT

The four natural science laboratories are arranged in sequence, and by means of specimens and models in well-lighted wall cases is displayed the progression of mineral, plant, and animal life to its final development in man. Banks of drawers are provided in the laboratories for collections of the varieties of each type displayed in the wall

cases. At the table are drawers for the working collections and tools distributed to students. In the instructors' laboratories are reserve specimens, models, pictures, charts, and diagrams.

Worthy of special mention are the following materials for study: —

The synoptic and Howell's college collection of minerals and rocks in the mineralogical and geological laboratory.

In the biological laboratories are the Deyrolle plant models, illustrating twelve of the leading families; the synoptical collection of invertebrates and vertebrates; the preparations (wet and dry) showing the habits, homes, and metamorphoses of many insects, the development of a snail, a leech, a crayfish, a horse-shoe crab, a spider, a fish, a salamander, a frog, a toad, a snake, and a lizard, displaying all stages of growth, from the egg to the adult form; dissected specimens of a clam, a crayfish, a lobster, a fish, a frog, a lizard, a turtle, a dove, and a rat, displaying separately the digestive, circulatory, and nervous systems; aquaria and cages; a series of skeletons, a human skeleton, a life-size manikin, a set of Auzoux models (eye, ear, larynx, brain, pelvis), and preserved vital organs.

In the geographical laboratories are several thousand carefully selected, mounted, and classified pictures, including photographs, engravings, half-tones, bromide enlargements, the Hölzer series of oleographs, and several hundred lantern slides. The models include the Jones eighteen-inch relief globe, Howell's (sixteen feet radius) model of the United States, and large model of southern New England, the Harvard series of physiographic models. Slated spheres, large and small globes are provided for class and individual use. Three sand-tables, each ten feet by four feet, afford abundant opportunities for sand modelling.

The collection of maps includes two maps of Switzerland, one beautifully shaded to show reliefs and drainage, and the other to show the same physical features combined with political and industrial features; two similar maps of Alpenland; Habenicht-Sydow physical series; Johnston political series; a series of thirty world maps, showing physical, productive, and political features; coast survey charts; topographic maps and folios; a series of maps of Massachusetts, showing relief, drainage, cities, railways, counties,

etc.; similar maps of Rhode Island and New Hampshire; a series of maps for study of map symbols; pamphlets, railway folders, magazines, etc., for commercial geography.

The mathematical department is supplied with collections of models for individual use and class observation in the study of geometry, arithmetic, and algebra in their appropriate development through all grades, including those of the high school.

The historical and literary departments are supplied with several hundred classified pictures and numerous charts.

The art departments are equipped with adjustable tables, models, type, and ornamental forms, pictures, drawings, and casts, illustrative of the phases of modern art teaching.

The library has been selected with especial reference to the needs of teachers. Department libraries are proportionately represented, and furnish excellent opportunities for general reference work and special investigation. Magazines and pamphlets for general culture and departmental study are numerous, the pamphlet division already including several thousand copies.

The three laboratories for physics and chemistry are equipped with modern improvements, and with apparatus for individual experimentation in both qualitative and quantitative work.

The manual training room is furnished with twenty-five sloyd benches and tools for working in clay and wood.

The gymnasium is located in the dormitory and is equipped with the apparatus for the practice of Swedish gymnastics and a system of shower baths. See page 45.

An electric projection lantern and numerous slides have been provided. The lantern can be used in six different rooms, and supplements the work in the various sciences, in literature, and in art.

DESIGN OF THE NORMAL SCHOOL

"The design of the normal school is strictly professional; that is, to prepare in the best possible manner the pupils for the work of organizing, governing, and teaching the public schools of the Commonwealth" (Board of Education, May 6, 1880).

The work of each department is to secure these ends: —

Pupils — The leading motive and continuous effort are to change the pupil's point of view from that of the student to

that of the teacher, to inspire him with the spirit of the true teacher, to train him to the noblest ideals and best habits of personality, thinking, and teaching.

Children — The pupil is placed from the beginning of his course in close contact with children, that through them there may be revealed to him such understanding of child-life in general and appreciation of the individual children as will impress upon his mind the necessity of their interests being his chief concern. That schools should be organized to satisfy the needs of children, that school management is the process of securing self-control by the children, that children should be taught, rather than subjects, are truths which are presented as of fundamental importance.

Subjects — The thought of the pupil is carefully directed to the subjects of a public school course. Each subject is analyzed to find its content, its natural or logical order, its teaching order. The appropriate sources of knowledge are found, the prominent processes of acquisition are emphasized, and corresponding forms of expression exemplified. The knowledge, disciplinary, and cultural values of each subject are discussed. Stress is laid upon accuracy of knowledge and the use of each subject as a *means* and not an end in education. Natural and helpful correlations of subjects are made, and the place of each in a course of study indicated.

Teaching — The process of learning is distinguished from the process of teaching, the pupil being led to perceive most definitely that in learning the student concentrates his thought upon the object, that in teaching the teacher concentrates his thought upon the student's mental process of learning. Pupils are led to discover by persona observation that the teaching process consists of two parts, namely, preparatory thought (*i.e.*, lesson planning) and consequent instruction (*i.e.*, teaching). Lesson plans are derived by the pupils from observed teaching and the study of typical plans, and are found to include consideration of (1) aims, that is, needs of the children to be satisfied; (2) right

mental activity of the child; (3) appropriate sources of knowledge and interest. Lesson teaching is perceived to be (1) skillful use of sources of knowledge and interest, (2) which use stimulates right activity in each child, (3) and enables him to satisfy his needs. Pupils, by practice in writing lesson plans and in teaching children in accordance with the plans, become certain that intimate knowledge of children and thorough lesson planning are, together with the personality of the teacher, the vital conditions for successful teaching; that lesson plans may free the teacher of the burden of the subject, and enable him to attend discreetly and heartily to the needs and interests of the children. Similarly, the place and purpose of recitations, drills, examinations, and criticism are brought before the pupils for consideration and judgment.

Organization — The principles underlying the organization of a school are arrived at by the pupils by direct study of the training school and other schools they have experienced, by consideration of children's needs as individuals and as members of society, and by use of the experience of teachers and other educational authorities.

Government — Pupils are led, by review of their own experiences in conforming, obeying, and controlling, by the testimony of others, by their knowledge of children, by their efforts in the training school, and by their study of psychology, to understand the relations between knowing, feeling, and doing, to value and use the instinctive reactions, and to attempt to form habits in themselves and children of right self-activity for the sake of self-development and service to others.

The school laws of the State receive due and appropriate study, in connection with the consideration of organization, government, and the history of education.

Order of Studies in the Two Years' Course

Junior Class		Senior Class	
First Term	Second Term	Third Term	Fourth Term
Drawing	Drawing	Drawing	–
Music	Reading	Grammar	Reading
Manual training	Gymnastics	Gymnastics	Gymnastics
Language	–	Literature	Literature
Chemistry	Physics	Geography	Geography (half term)
Mineralogy	Botany	Zoölogy	History of education and school laws (half term)
Physiology	–	History	
Geometry	Algebra	–	Psychology and pedagogy
Penmanship	Arithmetic	–	–
Child study: — Individuals Groups	Observation of teaching and control. Assisting	School organization Teaching at training school	School management Teaching and control
Kindergarten course omits manual training, chemistry, and part of geometry.	Kindergarten course omits algebra and part of the arithmetic.	Kindergarten course omits drawing and history.	Kindergarten course omits geography.

THE RANGE OF THE SUBJECTS

The professional work is indicated in general on pages 21–23, under the topic, "Design of the Normal School," but applies in detail to each of the subjects analyzed and described as follows. Accuracy and fulness of scholarship are strenuously emphasized.

Psychology and Pedagogy

The study of children is continuous through the two years' course. Individual children are carefully observed to ascertain individual physical, mental, and moral aptitudes and defects, in order that each child's needs may be satisfied. Groups of children — the healthy and the sick, the able and the weak, the bright and the dull, the tidy and the slovenly, the leaders and the followers, the good and the bad, etc. — are found, and their relative

numbers and importance estimated, that justice may be done to all. Based on these and similar observations made elsewhere are the pupils' conclusions as to native reactions, behavior, self-control, and tact.

In their study of the individual subjects of the course, pupils are taught to recognize the elementary processes of acquisition, the emotions aroused, the importance of interest, and the volitions resulting. The sources of knowledge, the stimuli of interest, the mental processes appropriate to the several subjects, and, in general, the conditions for right mental activity in each subject, are learned as individual facts.

In the observation and practice of teaching, effects of the teacher's knowledge of children, of subject, of fitness of mental process, of the influence of tact, of the possession of right habits, are discerned.

During the last term of the course, perception, memory, imagination, generalization, judgment, reasoning, the emotions, and the will are studied in sequence and detail. Facts of the students' consciousness, observations of others' minds, and books are the sources of knowledge. The pupils thus come to an understanding of the elementary processes and their interdependence, of the importance of interest, of the conditions for best activity, and of the formation of habits. Principles of psychology and pedagogy are apprehended and appreciated because of their guidance of thought processes, their productiveness of interest and certainty, their determination of method. The study of psychology and pedagogy is, throughout, for the illumination and inspiration of teaching.

School Organization and Management

These subjects are studied in a manner very like that described above. Observation and induction are the major portion of the process. The training school serves as the model of a school for children, the normal school as one for youth.

History of Education

The aims in this course are: —

1 To discover the progress of educational theory and practice.

2 To discuss the aims, method, and result of each.

3 To discuss the meaning and value of principles of education as evolved.

4 To find one's need of gaining inspiration from others.

5 To stimulate the desire to know the practice of other individuals and nations.

6 To liberalize, — foster the creative rather than the imitative spirit.

In the conduct of this course each pupil is provided with a brief compendium of the history of education as a foundation for his work; and a departmental pedagogical library is provided for reference use. Each pupil outlines the assigned topic for oral or written recitation, and free criticism follows. Frequent assignments of special subjects for investigation and report are made. Whenever feasible, educational theories and practices are illustrated in the conduct of the regular recitation.

School Laws of Massachusetts

The purpose of this course is to make the students familiar with the principal powers, duties, and relations of teachers, pupils, and other parties directly concerned in school work as defined in the Public Statutes. To this end, brief consideration is given to law, — its relation to custom, as subsequent rather than precedent; its purpose, in defining and unifying practice; its kinds, — permissive, compulsory, and prohibitory. The more important laws are then analyzed; and the several powers and duties granted and forbidden to each of the parties finally summed up and classified.

Nature Study and Natural Science

In the work in the natural sciences there is sought constantly the knowledge, the interest, the training needed by those who are to teach nature study and related subjects in elementary schools. Hence the aim is to cause the prospective teacher to possess and to be able to cultivate in others "what may be termed the elementary equivalent of the genuine scientific spirit, so that out of his native fondness for things about him shall come an enthusiastic truth-seeking, reverent attitude toward nature," an appreciation of the beauty, harmony and inviolability of nature's laws; together with some mastery of the means for subduing nature's forces and utilizing them for his own protection and development and for the social good.

Mineralogy — Each student is assigned a place in the laboratory, and is provided with apparatus and type specimens (see "Equipment," page 19).

He is taught to recognize and name a considerable number of minerals by practice in distinguishing their physical properties. A smaller number of the most common and useful minerals, with their varieties and the rocks in which they occur, are studied in greater detail. Special stress is laid upon such as can be found in the neighborhood of the school, and upon the uses of mineral bodies for manufacturing, building, and decorative purposes.

Students are led to see the value of such work in developing the power and the habit of close observation, critical comparison, and nice discrimination; also in cultivating interest in common things, and utilizing the collecting instinct of children for their education.

A few chemical tests are taught, and other interesting correlations made with the study of chemistry going on at the same time.

Each student is assigned a topic for special research, the results of which are presented to the class. This gives training in the use of books and in the orderly arrangement of subject-matter for teaching purposes. Each is required to make a collection of minerals and rocks of the region, and to illustrate the assigned topic; and field excursions to several interesting localities are made for this purpose.

Chemistry — The following are some of the topics considered: nature of chemical change, oxygen, nitrogen, air, hydrogen, water, the forms of carbon, carbon dioxid, coal, illuminating gas, combustion and flame, foods, respiration, fermentation, manufacture of lime, iron and glass, acids, alkalies, salts.

Each student prepares simple apparatus and performs experiments, being guided to the proper interpretation of the observed results by printed questions and directions. Ability to use experiments in teaching is especially sought. Those who work faster or who have had the subject-matter before are given extra exercises, adapted to their ability, to present before the rest of the class.

The laboratory work is followed by class discussions, and notes on each experiment are written, which are expected to be in good form, correct in English, and to cover the following points: —

1 Purpose of the experiment (topic to be illustrated).

2 Apparatus (what we use).

3 Experiment (what we do).

4 Results or observations (what we learn by the senses).

5 Inferences and explanations (what we learn by thinking, reading, etc.).

6 Applications (what things in every-day life, in nature, in other studies, the experiment may be used to teach or illustrate).

Special attention is given to the applications of experiments in explaining the facts of common life, or of other studies, such as mineralogy, human physiology, and nature study. Visits are made to the gas works, a lime kiln, and an iron foundry.

Physics — The aims and the method are the same as in chemistry. Portions of the subject are selected, which, it is thought, will be most useful to teachers in elementary schools, such as: pressure in water and air, with applications to city water systems, artesian wells, hydraulic press, specific gravity methods, barometer, pumps, siphon, breathing, etc., nature, properties, and states of matter; simple machines, and the conservation of energy; heat, and its manifold applications. In addition to the individual laboratory work, students perform assigned experiments before the class, and question their classmates about the results and their explanation. Having gained some knowledge of physical principles, some power to reason from effect to cause, some skill in experimentation and in questioning, and having learned how to study and to plan lessons, students conduct similar exercises (in other portions of the subject) in connection with other studies and in the training school.

The school is well supplied with apparatus; but special pains are taken to teach students to improvise, from such materials as may be gotten anywhere, inexpensive apparatus, which they may take into the schools to illustrate the simpler facts of physics, physical geography, and human physiology.

The work is chiefly qualitative, but wherever possible computations based upon measurements made in the experimental work are the means of correlating physics and mathematics and of securing greater power in both.

Drawings or diagrams are required when they can be made to aid in the expression of conditions and results.

Botany — Plants are studied as living, breathing, working beings, with structure adapted to their functions and their surroundings. Hence plant physiology is given a prominent place and experiments are performed by members of the class to show how plants live and grow. The work is begun in the winter, with twigs and buds of trees in the hands of each pupil. These are put in water, and their development watched. Each student plants seeds of squash, bean, pea, and corn, which are cared for in the laboratory, and the

morphology of the seeds and seedlings is made out. Drawings, properly labelled, to illustrate gross structure, are asked for, which, though they be diagrammatic, will not merely suggest but will express accurate conceptions of the real construction of the object represented.

The cycle of life-changes from seed to seed again is traced, such topics as the following being used: —

The conditions of germination
Storage of food in seeds, etc.
Roots and root work
Relation of plants to the soil
Stems and their uses
Buds and what they promise
Leaf arrangement, with reference to light, air, water
Food of plants, — how taken, how used
Leaf structure and work
Nature and uses of floral organs
Fertilization, pollination and cross-pollination
Fruits, and their uses to the plant
Seed dispersal (what plants do for their young)
Relations between plants and animals
Uses of plants to man and other animals
How plants protect themselves
The struggle for existence among plants

One or more topics, with references to text-books and reference books, are assigned to each member of the class, who prepares an outline of the subject-matter, collects material to illustrate the same, teaches or presents a portion of the subject to the rest of the class, and prepares a plan for teaching a similar lesson to children.

As the season allows, out-door excursions are taken, to study plants alive and at home. The work is confined almost wholly to the higher plants, for lack of time and because microscopic work is considered to be neither suitable nor feasible for elementary schools. Prepared slides are shown by the compound microscope, or projected on the screen.

Zoölogy — A series of typical animals is so studied as to make out their plans of structure and the adaptation of their structure to habits and surroundings. Related forms are compared with these, and some idea of classification is developed. Each student

examines both live and preserved specimens, furnished by the school or collected by himself, being guided by definite directions and questions for thought. The facts observed are expressed by labelled drawings and by written statements.

The use that may be made of the material in giving animal lessons in elementary schools is constantly kept in mind. Hence such forms as are easily obtained in the interior are selected, and very little dissecting or microscopic work is required.

The work begins in the fall, with the study of insects, such as locusts and crickets, dragon flies, house flies, butterflies and moths, honey bees and wasps. Their life history is traced by means of a series of imported preparations, showing all stages from egg to adult (see "Equipment"), and also, as far as possible, by means of live specimens.

Other animals studied are the lobster, the spider, the centipede, the millipede, the earthworm, the fish, the frog and its development, common birds, and mammals.

Special topics are assigned for library work, lesson plans are prepared, and teaching exercises conducted as in botany.

Physiology — The course includes so much of anatomy as will make vivid the harmony between structure and function, so much of physiology as will emphasize the fundamental importance of the vital functions, and so much of personal hygiene as should be practised by one knowing his body as a physical organism, the abode and instrument of his mind, and respectful of it because of its possibilities in use, strength, and beauty.

The range of the subject is: The human body as a whole; its external and structural parts; general plan of the body; the general structure of the limbs and walls and the different systems of the body, — digestive, absorbent, circulatory, respiratory, secretory, excretory, osseous, muscular, and nervous; their functions; the conditions of health. School hygiene, sanitation, and emergency lessons receive proportional consideration, our own environment furnishing ample and proper illustrations. The kind of work is distinctly objective and practical.

Gymnastics — Health of the individual is the chief and constant consideration. Physical culture is induced by seeking to obtain ideals of physical vigor, co-ordination, and grace, by means of volitional, formal exercises, and spontaneous games, and the habit

of physical expression of noble ideals. The Swedish system of gymnastics is taken as the basis. Adaptations to needs and interests of children, youth, and adults are impressed vividly.

Instruction in the theory of gymnastics is correlated closely with the study of the human body, as indicated under physiology. The physiological basis causes the importance of gymnastics as a need of personal health and as a feature of public school education to be acknowledged heartily, and leads to zealous action.

The gymnasiums are well ventilated and lighted, fully equipped, and conveniently adapted for formal exercises, games, and athletics.

Geography

Geography is knowledge of the earth as the home of man.

Elementary geography is knowledge of the appearance, activities, uses, and distribution of geographical objects. This includes the three phases of work common to all studies: (1) the acquisition of ideas from the objects; (2) the expression of these ideas objectively (*e.g.*, by modelling, showing similar objects, by drawing and by symbols); (3) the reading of models, pictures, and symbols to recall and acquire ideas.

The main divisions of elementary geography are: —

Preliminary Study of Geographical Objects — This work is properly a section of nature study, and is treated as such. It includes: (1) the observation, comparison, grouping, and reasoning concerning local objects; (2) the expression of this knowledge by modelling, drawing, and the use of symbols, especially *geographic symbols;* (3) the imagination of geographical objects and relations different from those at home, by the aid of pictures, text, and conversation; (4) the reading of maps of his own locality, of distant regions, especially of those places of which he has seen pictures. In this phase of imaginative work much emphasis is given to thinking the appearance and activity of the objects represented; location is of secondary importance.

This preliminary study includes the different elements which enter into child life, — physical, biological, and sociological. The elements most common in children's experience are the industrial and commercial, and caution is needed lest the teaching of the physical element receives undue emphasis. The physiographic conditions are but the basis of biological and sociological aspects.

The Earth a Whole — It is the first presentation to the imagination of pupils of the simple world-wide views of the earth as the home of man. Each pupil is led to feel: —

1 That the earth is a whole, a unit, having qualities or powers as a whole differing from the qualities of its parts.

2 That each part, land, water, atmosphere, and life, has its own qualities, differing from the qualities and powers of all other parts.

3 That the several parts and the whole are all *working* together to make the earth a home for man, and the means of his progress to better, nobler, higher life.

The Continents — The order and purpose in the study of each continent are to: —

1 Find what part of the world ridge, of the world drainage, of the world climate, of the world productions, of the world races, each continent includes. This is review work.

2 Find such new or peculiar details of relief, drainage, climate, soil, productions, and people as are necessary to understand and appreciate the work of the continent and its inhabitants in the development of the people of the continent.

3 Think the continent anew in its relation to the world ridge, yet with more completeness, in order to perceive more clearly the special use and influence of each continent in the development of the whole human race, and to emphasize the interdependence of continents and of people.

Especially the dependence of all life forms on geographic conditions is made prominent. So, too, the influences of past and present physiographic phenomena are noted.

The Leading Nations — The people, not the territory, are the central thought. The territory is the place of past and present activities. The relations of the geographical objects in such a territory as used and modified by man in his progress are essentially historical. Hence geography and history are inseparable in this division of the subject. The general order of thought and the aim in the study of the nations is to: (1) trace briefly their past progress; (2) find the natural advantages or disadvantages of geographic conditions; (3) find intentional use made of geographic conditions to facilitate progress; (4) ascertain with considerable fulness their present status and progress; (5) discern international relations and their effects; (6) measure their respective usefulness to mankind.

The State and its Neighbors — The study of the State is not to follow the study of nations, but from the beginning and at every stage of the course such facts as pertain to the State are culled and emphasized. At the end of the course the geography and history of the State are reviewed with great care. The teaching of the geographic conditions of the territory of the State, of the past and present usefulness of her citizens, and of the opportunities to be grasped, arouses in every pupil such a love of country, such a pride in the State, as stirs him to make her more glorious even in the future than in the past.

The City or Town — The current thought is as for the study of the State. Local geography and local history are inseparable The past and present place and usefulness of the city or town in any or all the relations of life are taught, with the purpose of making every child an interested, intelligent, active citizen.

Trips — Nature and man very materially add to our sources for study in this vicinity. Erosion, including the formation of limestone gorges, caverns, sinks, and a natural bridge, and other forms of water action in stream and pond, are abundantly illustrated; glacial smoothing, scratching, and deposition are prominent; and the processes of mountain building and destruction are easily demonstrable.

The industries of our manufacturing region are unusually varied, and afford admirable basis for industrial, commercial, and social conditions.

In order to realize these opportunities various trips are taken by the class each year. About half of these occur during school hours, and are required; the remainder, mostly Saturday excursions, are voluntary and well attended. None are made exclusively geographical, but features of biological, physical, geological, historical, governmental, and literary interest are carefully observed and discussed. The scope of observation is indicated by this list of places visited: Adams (South Hoosac) valley; Beaver (North Hoosac) valley; natural bridge; Greylock foot-hills and cascade; Greylock; cotton, woolen, paper, grain mills; Arnold Print Works; shoe shop; newspaper office. Cutlery works (Turner's Falls), Deerfield and Connecticut valleys, Deerfield, Concord, Lexington, Cambridge, Boston, and Plymouth in 1900; New York, Philadelphia, and Washington in 1901.

History

The course in history occupies the first half of the second year. The central thought of the course is the development of our people and institutions and the growth of present-day problems, leading to intelligent outlook upon the future.

The strong factors in this evolution of the nation, as of the individual, we believe to be three: —

(*a*) Inheritance: the influence of social and political ideas and customs, gradually evolved during the past.

(*b*) Environment: influence of the place, which conditions occupations, life, and even thoughts and ideals. In this is the key to the correlation of geography and history.

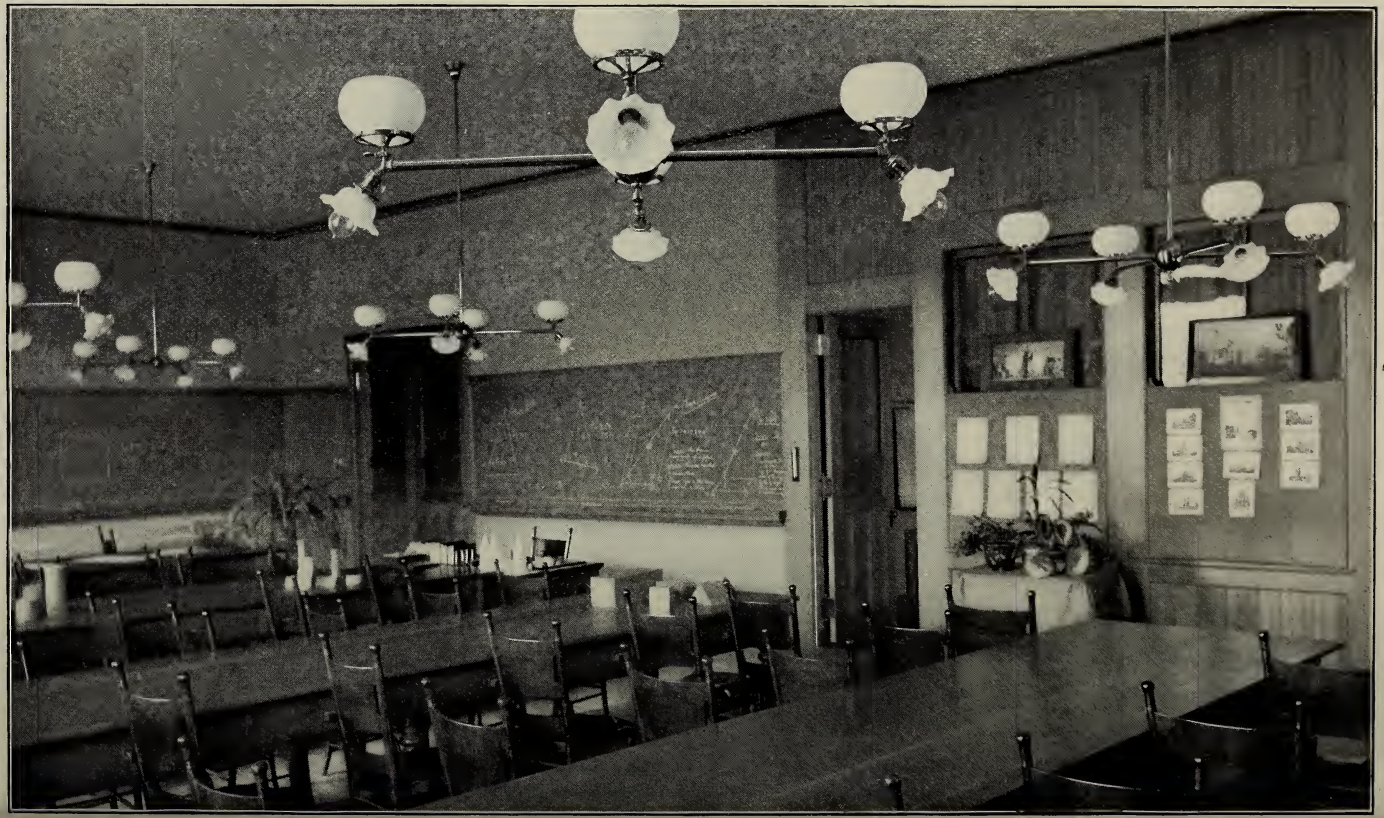
(*c*) Personal reaction or inventiveness: this modifies even environment and inheritance.

To see the force of these factors, the first part of the course is devoted to English history. Through political documents and social and religious movements the development of the English nation, with its ideals and political institutions, is traced, in order to understand the people who founded the American nation and the ideas with which they came.

The greater emphasis is given to the development of our own nation. The influence of new environment is shown from the very first in the new living and thinking forced upon the early colonists in the wilderness; the same processes continued as the pioneers pushed the frontier westward. As the first settlements grew larger, conditions of life and occupation changed and culture grew; this evolution, like the first frontier, moved westward; hence successive waves of frontiers — those of the Indian, fur-trader, pioneer, farmer, manufacturer — are discovered to have moved westward. To-day we are in each section of the land approaching that phase of development where the occupations are best suited to the geographical character and possibilities.

In tracing this development we find the key to the political, financial, and social questions of each epoch of our history, and a guide to understanding present conditions and the outlook for the future. Throughout the work the emphasis must be laid, not on facts and dates, but on relations of facts and development.

It is our aim through this study to find the value of history as a school subject, and to find the way of studying and teaching the



several periods, — discovery, settlement, war, administration, development. The professional side of the work is realized through observation of lessons, planning of original lessons, and practice in the training school.

Mathematics

Geometry — The scope of the work is: (1) geometric magnitudes, illustrated by models; (2) relations, measurements, drawings, descriptions, definitions; (3) study of plane figures and discovery of theorems; (4) study of solids, discovery of theorems, measurements (according to time); (5) objective and mathematical demonstration; (6) occurrence of geometric forms in nature and architecture; (7) conception of the geometric magnitudes as real, non-material, accompanying all preceding steps.

Algebra — The scope of the work is: (1) generalizations leading to laws of number, as exemplified in six fundamental processes, — addition and subtraction, multiplication and division, involution and evolution; (2) use of axioms in solving of equations, simple and quadratic; (3) deducing of formulas, their interpretation and application, as in factoring, transformation of fractions, binomial theorem, etc.

Arithmetic — The scope of the work is: (1) number, as applied to measured quantity, as length, area, volume, capacity, weight, money values, time, etc.; (2) consideration of objects adapted to number teaching; (3) drawing, cutting, building, to find and illustrate values in relation to unit of quantities, in relation to each other; (4) six fundamental processes (see algebra), laws of number as used in each; (5) application of processes in mensuration, proportion, forms of percentage, etc.; (6) applications to actual conditions of life, — industrial, commercial, governmental, social.

English

The general aim of the work in the department of English is so to acquaint the student with the many forms of English expression as to impress him with the importance of the teaching of English. Study of the student's personal experience in learning and that of children in the grades is made the basis of all study of methods. The course comprises language, grammar, composition, literature, and reading. The subjects are correlated as much as possible.

Language — The order of teaching is: (1) the significance of language; (2) what it includes; (3) the various means by which

the language power and knowledge of the child are increased in the lower grades; (4) the methods and values of the forms of teaching, together with devices. Stress is laid upon story-telling, the use of pictures, letter-writing and the principles of composition. Constant practice by the student in the doing and teaching of these things is required.

Grammar — The study of scientific grammar is pursued for its disciplinary value to the student, — for the purpose of training the mind into thinking abstract relations. The discovery of a logical order in the teaching is made, and from the knowledge thus gained elementary grammar is directly derived by the student.

Composition — The aim in this work is to lead the student to appreciate worthy diction and style, as exemplified in our masters of English; to recognize, through the analysis of various pieces of literature, the essential elements of good composition; and to apply this knowledge to improve his own writing and speech.

The study comprises: (1) the composition as a whole; unity of material and of aim, unity of the paragraph, proportion of parts, simplicity of structure, sequence, and movement of thought, transitions, introduction, and conclusion; (2) the paragraph: factors and modes of development; (3) the sentence: conciseness, combination of related parts, punctuation, variety, choice of words, euphony, emphasis, period, climax, balance.

Literature — The value of literature as one of the most important factors in spiritual education is emphasized. Sympathetic and appreciative rather than critical study is made of various literary productions. The aim in this course is to inculcate a desire for reading, to cultivate a taste for good literature, to uplift by giving fresh inspiration and new ideals of life. The method is reading and studying of the best things that have been written, rather than studying *about* literature and authors. The history of literature and the biography of authors are studied in so far as will aid in accomplishing the purpose of the course.

Lists of poetry, fiction, and essays are presented to the student from which he selects a required number. The reading is carried on and reports are made to the class according to definite outlines.

Some of the masterpieces of English literature are read not only for the culture thus afforded, but for the purpose of comparing the past with the present in matter and technique; of finding out how

much of the material of the past is used to-day and under what modifications; of fixing standards of judgment based upon wide reading.

Reading — The aim in this course is to give the students a knowledge of the principles that underlie the art of expression, and to develop the power to use these principles in their work.

Vocal expression is the co-ordination of mind, voice, and body in the utterance of thought and feeling, hence the training is in these directions.

1 Mind training — Clear thinking is the first condition of clear expression. Various selections are studied to develop the ability to think clearly the ideas and their sequence as expressed in the text. To this end narrative, descriptive, and conversational prose, and lyric and dramatic poetry are studied progressively. Especial emphasis is laid on story-telling and extemporaneous speaking as means of developing in the students the power to express what they have to say simply, directly, and naturally. Myths, legends, folk-lore tales, and numerous other stories, suitable for use in teaching the various branches in the different grades, are prepared and the best means of presenting are discussed.

2 Voice training — Exercises are given to free the voice from limitations and acquired faults, to bring out its latent strength and purity, and put it in such a condition that it may adequately meet the demands made upon it in teaching and speaking.

3 Body training — Only as much of this work is given as will enable the students to bear themselves well before their schools or audiences.

Drawing

The purpose of our art study is to consider the principles governing good art, to study and enjoy examples of art embodying these principles, to give an appreciation of harmonious coloring, and to feel the connection existing between the arts, music, literature, and painting, realizing that all are governed by the same general principles. Students should be alive to see and enjoy whatever is beautiful in the world about them and in their own work to realize that "art is simply doing whatever one has to do in the best possible way."

The class work is grouped under the following heads: Appearance, — perspective elements, pictorial drawing (single objects, grouping, and composition). Structure, — elements of form, ele-

ments of beauty, structural design. Enrichment, — color, elements of ornament, decorative design.

An abbreviated course in the history of art is carried on, parallel with these subjects, and the pupils are encouraged to collect reproductions of the world's best examples of architecture, ornament, sculpture, and painting.

The pupils use the following mediums of expression: watercolor, pencil, charcoal, and blackboard crayon. Blackboard illustrative work from memory along all lines of work studied is an important feature of the course.

Music

Tone perception: listening to voice and piano; scale tones and exercises by imitation; writing from oral dictation.

Tone production: securing softness, sweetness, purity of tone; developing appreciation of beauty of tone; study of child voice.

Sight reading: daily practice in music; thinking, silent and oral reading.

Analysis of form: developing understanding and appreciation of musical form; most important forms analyzed; illustration by voice and piano; application in appropriate phrasing, etc., in oral work.

Melody: laws illustrated; study of melodies from the symphonies, sonatas, oratorios, operas, and of the best songs; writing of original melodies; study of children's songs, with reference to selection for school use.

History: lives of eminent composers; illustrations, vocal and instrumental, to gain familiarity with types and cultivate taste for music.

Interpretation: piano playing for pupils once a week in normal school and training school; explanations of graded selections illustrating rhythm, melody, harmony, form, and adaptation to expression of emotion.

Chorus work: practice twice a week in chorus reading; a musical program given at Christmas and Easter.

Glee club: practice twice a week; two concerts given in the year; singing for pupils in training school.

Piano music: the collection includes works by eminent composers, graded and progressing in difficulty to Beethoven's sonatas and Bach's fugues. These are kept near the piano for the use of students. A duplicate collection is in use in the training school.

GYMNASIUM

Manual Training

The term manual training means educational handwork, — the cultivation of the hand to express the ideas of the mind. The aim is the development of the individual through self-activity in manual expression. The work of the children consists of designing, modelling in clay, simple construction in wood, weaving, basketry, sewing, embroidery, and printing, as the ability of the pupil permits. The problems increase in difficulty as the individual gains in ability, the purpose throughout being, so far as circumstances permit, to suit the work to the needs of the individual. Relative difficulty and interest are considered important factors. The normal students follow, as far as time permits, the line of work indicated for the training school, the object of the work not being to prepare teachers of manual training, nor to furnish an adequate course for individuals, in whose previous education hand training has not played an important part, but rather to demonstrate the value, and lead students to appreciate the importance, of handwork as an active factor in early education, and to prepare certain pieces of apparatus for teaching purposes.

TRAINING SCHOOL

On an adjacent lot is a modern brick building, containing twenty class rooms, an assembly hall, two large basements, playrooms, a woodworking room for the kindergarten and first primary grades, the motor and boiler rooms. In an annex is the gymnasium, forty by seventy-two feet, supplied with Swedish apparatus sufficient for the accommodation of classes of forty pupils each. All grades are represented, beginning with the kindergarten and extending through nine years of primary and grammar work to the high school. In each room is a regular teacher in charge of a class not exceeding forty pupils. The principal is free for teaching in any grade, and for the direct observation and instruction of the normal students.

Unusual opportunities are afforded for the study of children and the practice of teaching. Students begin their work in this department immediately upon their entrance into the normal school, and continue it regularly throughout

the course. The rapidity of progress through the various stages of the training school work depends on the ability and previous experience of the student. Definite oral instruction and printed schedules guide the observation of children individually, in groups, in classes, and the observation of teaching and control. In general the order of work is as follows: —

First Year — First term: reading of individual children and of groups begun. Second term: observation of the class for prevailing and peculiar qualities; observation of teaching and control emphasized.

Second Year — Third term: study of school organization and management, and assisting in teaching and management. Fourth term: practice in teaching, the amount of responsibility conferred depending on the ability of the student.

Third Year — Responsible charge of classes, elective work. Students who have taught successfully before entering are given opportunities for practice in teaching and disciplining as early in the course as their abilities warrant.

Close and appropriate supervision and instruction are given students by the regular teachers of the several grades and by the principals of the various departments, thus ensuring reasonable progress to students requiring extra opportunities in the practice work of teaching.

Equipment

The training school is bountifully supplied with the means of instruction, and the resources of the normal department are always available for daily use. Class libraries are located in each room, thus stimulating pupils to swift and sure lessons in order to get time to read in school, and encouraging them to discriminate as to home reading.

The *kindergarten department* occupies a suite of three sunny rooms which can be opened into one. The equipment is worthy of special mention. Froebel's spirit and principles are followed rather than the letter.

Toys — The collection is large and represents all the industries requiring the use of animals, conveyances, household apparatus, tools, means of production, and other forms of social life. The toys are used in free play before the opening of the session, and in guided play as occurring in the program.

Sand-table — This is an important factor in representing the conditions of industrial life. The work, whether free or guided, is distinctly constructive, collective, and increasingly co-operative, and affords the sympathy, help, and inspiration which only work with other children can give.

Enlarged Material — The building gifts are in three sizes — one inch, one and one-half inches, and two inches. The children because of their greater dexterity and larger products with the enlarged material discarded the one inch material, and that is found of real value in the early primary grades. The one and one-half inch size is used for table work, the two inch material for building on the floor. Similarly, enlarged sticks, tablets, peg boards, and folding paper, etc., are in use.

Weaving — For reasons mentioned above children do most weaving on large wooden frames, with cloth or worsted. Some very simple work is done with raffia.

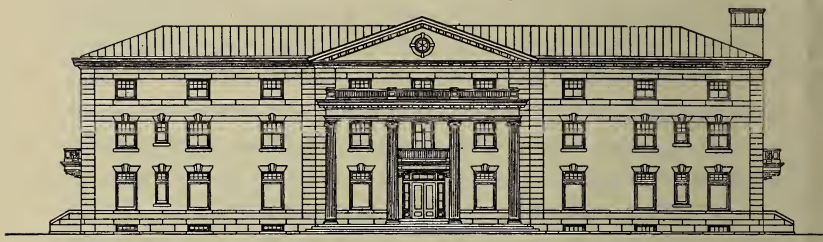
Woodworking — In a corner of the basement a small workshop has been established. Small saws, hammers, and screw drivers are used in making ladders, bed frames. carts, tables, coops, etc. Children also stain the articles made. A doll's house is now in process of co-operative construction.

Gardening — A large plot of ground is arranged in beds, planted, and cared for by the children. Flowers and vegetables are gathered in season and used for satisfying friendship and interpretation of life.

Cooking — The vegetables grown in the garden are cooked in the school-room, corn is popped for food and decoration, maple syrup is boiled to sugar or wax, etc., — and all to give glimpses into the meaning of life and to cultivate the simple, vital virtues.

Rhythm — Special effort is made to stimulate the perception and expression of rhythm. Conversation, prose, poetry, music, pictures, and design are all used at appropriate times. Music is chiefly used; the children enjoy it most, respond to it most readily, obeying its changes promptly without aid of words from the leader.

Natural movements, such as walking, hopping, running, skipping, jumping, sliding, skating, etc., are performed with their natural rhythm, with and without music, resulting in marked freedom and control of bodily action. Rhythmic games, imitations of children's plays and of animal movements are constantly used in teaching obedience, self-control, co-ordination, and concentration.

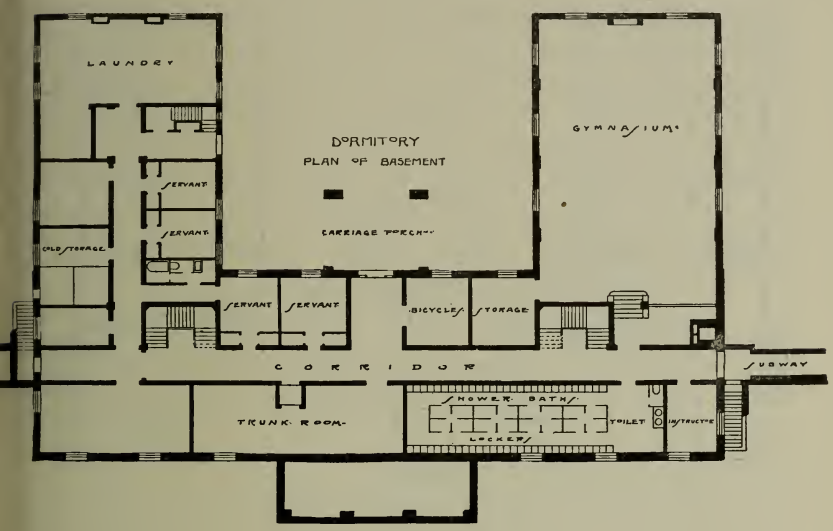


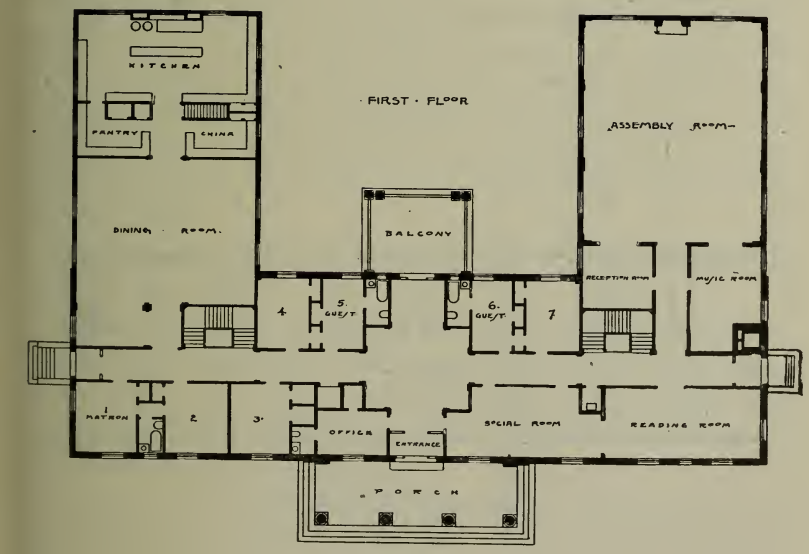
EAST-ELEVATION.

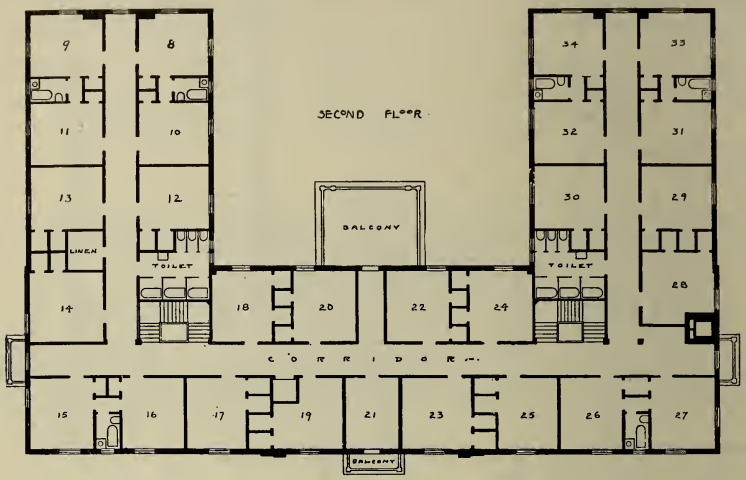
THE DORMITORY

The dormitory is now being built and will be ready for occupancy at the beginning of the fall term. Accommodations will be provided for sixty students.

The material of the dormitory is yellow brick and white marble, thus carrying out the color scheme. The building is 156 feet long and 100 feet wide, the courtyard being about 58x70 feet. On account of the slope of the land the basement floor is at grade with the courtyard, thus securing dry and light living rooms and making the wings as seen from the courtyard three stories high. The balcony over the east porch is available for persons living on the third floor, and the two west balconies accommodate those living on the first and second floors. Two hospital rooms (41, 43), with suitable furniture and intervening bath room, are on the third floor. The building is heated by steam and lighted by electricity. A subway connects the dormitory and the school building, affording easy access to the gymnasium and protection during inclement weather.


LAUNDRY
DORMITORY
PLAN OF BASEMENT
GYMNASIUM
SERVANT
SERVANT
COLD STORAGE
CARRIAGE PORCH
SERVANT
SERVANT
BICYCLE STORAGE
CORRIDOR
SUBWAY
SHOWER BATH
TRUNK ROOM
LOCKERS
TOILET
INSTRUCTR


KITCHEN
FIRST FLOOR
ASSEMBLY ROOM
PANTRY
CHINA
DINING ROOM
BALCONY
RECEPTION RM
MUSIC ROOM
4
5. GUEST
6. GUEST
7
MATRON
2
3
OFFICE
ENTRANCE
SPECIAL ROOM
READING ROOM
PORCH


SECOND FLOOR
9
8
11
10
13
12
LINEN
TOILET
14
18
20
22
24
BALCONY
34
33
32
31
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29
TOILET
28
CORRIDOR
15
16
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19
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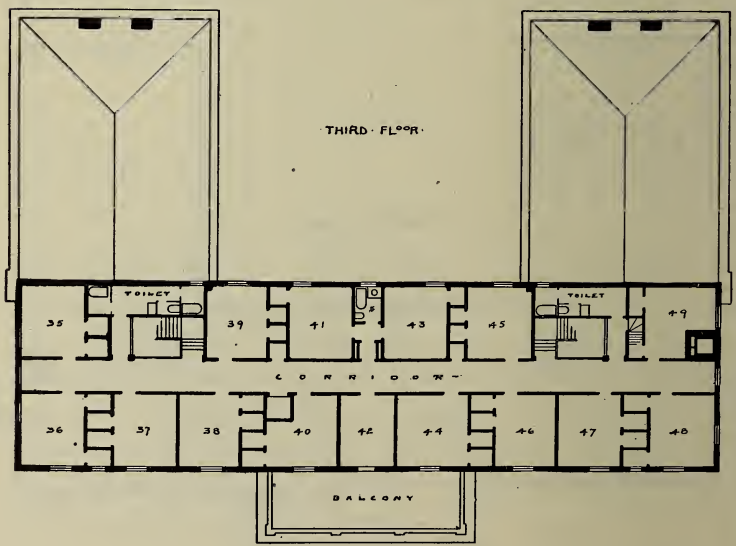
26
27
BALCONY


THIRD FLOOR
TOILET
35
39
41
43
45
TOILET
49
CORRIDOR
36
37
38
40
42
44
46
47
48
BALCONY

Unusual facilities are provided for cultivating a homelike and beautiful social life. The rooms of the first floor afford opportunities for all forms of mental enjoyment, and the gymnasium in the basement is convenient for daily evening physical play, just before retiring.

Two students occupy one room. Each room is supplied with chairs, study-table, book-case, bureau, commode, screen, two couches (three feet wide), mattresses, pillows, coverlets, and rugs. Each boarder will bring bedding, towels, napkins, napkin ring, and two clothes bags.

All articles sent to the laundry must be distinctly and indelibly marked with the owner's name. *Initials will not answer.* Trunks also must be marked so as to be easily identified.

Rooms are assigned to entering students according to priority of application. If there are more students than can be accommodated in the dormitory precedence will be given to those who reside in Massachusetts.

EXPENSES

Tuition is free to all residents of Massachusetts. "Each pupil from another state than Massachusetts attending a normal school supported by this state, from and after the beginning of the autumn session of 1901, shall pay to the principal of the school attended, at the beginning of each half-year session, the sum of twenty-five dollars for the use of the school."

Text-books and supplies are free, as in the public schools.

State Aid, not exceeding one dollar and one-half per week, may be granted to deserving persons after they have been in attendance for at least one term, provided they are residents of Massachusetts, and do not live in towns where the normal schools are situated.

Board — The regulations of the Board of Education require that the boarders shall pay the current expenses, which include table board, heating, lighting, laundry, and

service. The price of board in each of the boarding halls connected with the normal schools of the state is $4 per week or $160 for the school year, payable in advance, in four payments, one every ten weeks, beginning with the opening of school in September.

The object of this payment in advance is to secure the purchase of supplies at wholesale cash prices, thereby lessening the cost of supplies and saving to each boarder much more than the interest of the money advanced.

These rates are for such time as the school is in session, and for the Thanksgiving recess, but for no other recess or vacation. Pupils whose homes are at a distance may, on permission of the principal, remain at the hall during any vacation, except the long one in the summer, on payment of the additional sum of $4 per week during such vacation. The hall is closed during the summer.

When pupils leave the school before the expiration of a term, money paid in advance will be refunded pro rata. No deduction is made for temporary absence from the hall.

If there are vacant rooms, those who wish to room alone may do so, on payment of the additional charge of fifty cents per week.

Employment — Capable and reliable students can reduce their expenses by assisting in the household work, for example, by waiting on table, washing silver and glass, taking care of corridors and public rooms, etc. Efficiency, need, and priority of application control the appointments.

STUDENTS

Graduate Kindergarten Course

Susie Clementine Boylan	North Adams
Ella Louise Washburn	North Adams

Senior Class

Grace Shepard Allen	North Adams
Frances Catherine Andrus	Sheffield
Mary Grace Baker	Lenox
Belle Carrie Brown	Adams
Adaline Bryant	Clarksburg
Margaret Cecilia Burke	North Adams
Anna Elizabeth Burns	North Adams
Eunice Butterworth	North Adams
Grace Elna Call	Shelburne Falls
Minnie Chapel	Washington (Becket) *
Flora Livingston Cobban	Dalton
Elizabeth Louise Danis	Dalton
Flora Belle Dickinson †	Charlemont
Nellie May Easland	Pittsfield
Mary Dugdale Emmott	North Adams
Myrtle Newcomb Fake	North Adams
Jeannette Catherine Flaherty	Pittsfield
Margaret Ellen Hennessey	Dalton
Flora Elizabeth Hollis	Windsor (W. Cummington)
Annie Elizabeth Kelley ‡	North Adams
Anna Veronica Kelley	North Adams
Helen Rhoades Leffingwell	New Marlboro
Agnes Murray Malcolm	North Adams
Florence Mabel McVey	Williamstown
Mabel Eda Medbury †	Wilmington, Vt.
Lucille Chase Morse	Oxford
Anna Loretta Murphy	Hinsdale
Jennie May Reed	Colrain (Griswoldville)

* Post-offices are in parentheses.

† Entered February, 1902.

‡ Graduated February, 1903.

Ella May Rowe	Alford (N. Egremont)
Anna Cecilia Ryan	North Adams
Blanche Elizabeth Sabin	Lee
Bertha Elizabeth Smith	Williamstown (South)
Sophia Cochran Stocking *	Williamstown
Teresa Claire Sullivan	North Adams
Jessie Flavia Swift	North Adams
Mae Manola Tyler †	North Adams
Alma Isabel Walden	Williamstown
Helena Rebecca Walley	North Adams

Senior Kindergarten Class

Frances Baldwin Grant	Southfield
Mary Arvilla Sampson	North Adams
Lucie Maria Ware	Shelburne Falls

Junior Class

Hattie Louise Beers	Adams
Katherine Theresa Behan	Pittsfield
Emma Bittner	Adams
Amy Evangeline Bruce	North Adams
Ellen Agnes Burns	Pittsfield
Jeanie Liddell Burns	North Adams
Katherine Kelly Burns	Stockbridge
Ethel May Burrington	Heath
Grace Gertrude Carney	Adams
Margaret Agnes Cassidy	Sheffield
Mary Margaret Clark	Lenox
Clara Elizabeth Conant	Greenfield
Elizabeth Helen Coughlin	Cheshire
Alice Louise Deane	Stockbridge
Annie Marion Fuller	Adams
Bertha Helena Gleason	Clarksburg
Katherine Agnes Gleason	Pittsfield
Ethel Viola Goodrich	Hancock (Wyomanock, N. Y.)
Caroline Burr Grant	Southfield
Christina Mary Green	North Adams
Agnes Margaret Haggerty	North Adams
Annie Harwood	Fall River
Ethel Rachel Horne	West Newfield, Me. (E. Wakefield Depot, N. H.)
Lena Minnie Hubbard	Wilmington, Vt.
Hope Kelsey	Alford (R F. D. No. 1, Great Barrington)
Mary Leonard	North Adams

* Entered February, 1901; graduated February, 1903.
† Graduated February, 1903.

Grace Catherine McSweeny	Pittsfield
Clara Elizabeth Nicolai	Great Barrington (Housatonic)
Caroline Grace Preo	North Adams
Edith Clara Sargent	North Scituate
Mabelle Hall Thompson	Adams
Mabel Sprague Ware	Shelburne Falls
Ethel White	Chester
Winifred Isabelle Wright	Pownal, Vt.

JUNIOR KINDERGARTEN CLASS

Gretchen Benjamin	Greenfield
Carrie Mabel Bridges	Williamstown
Lena May Campbell	North Adams
Daisy Dean Ritchie	Bennington, Vt.
Grace Marion Thompson	Adams

SPECIAL STUDENTS

Helen Baright	North Adams
Bessie Sherwood Barnes	Pittsfield
Helen Louise Church	Ashfield (Shelburne Falls)
Elsie Whitney Cronan	Shelburne Falls
Dora Katharine Gardner	Hancock
Edith M. Simmons (Radcliffe)	Adams

VACATION STUDENTS

Normal Graduates

Lila Adelita Partridge	Adams
Emma Eugenia Watson	North Adams

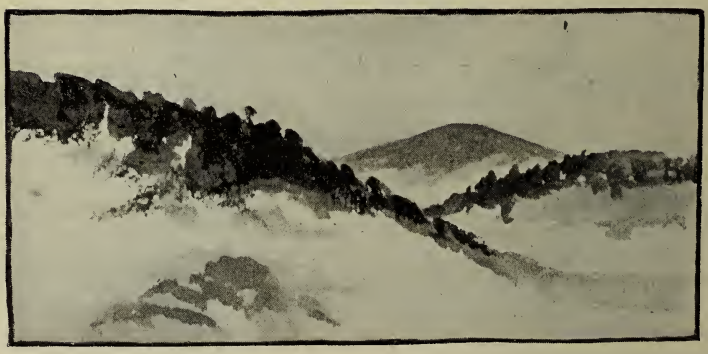
Other Teachers

Jennie Rebecca Ballard	Charlemont (East)
Nellie Grace Cody	Middlefield
Addie M Congdon	Lenox
Sara E. Cottrell	Middlefield
Sarah Elizabeth Downes	New Marlboro (Great Barrington)
Cora May Hallam	Shelburne Falls
Grace Helen Henderson	Webster
Myra Lizzie Hillman	Colrain (Adamsville)
Etta L. Howes	Ashfield (Buckland)
Amy Turner Loom	Monterey
Mary Magdalene McDonnell	Lenox (New)
Mary Elizabeth Martin	Monterey
Georgia Viola Morgan	Washington (Becket)
Elizabeth Sarah Newman	Florida (Hoosac Tunnel)
Margaret Teresa O'Hagerty	Adams

Emma Louise Parker	Ashfield (South)
Clara Lovina Thayer	Ashfield (Spruce Corner)
Ethel Jennie White	Colrain (Adamsville)
Mary Adeline White	Rowe
Emma Davis Wilson	Rowe

SUMMARY

Kindergarten course		10
Graduate students	2	
Senior class	3	
Junior class	5	
Regular course		78
Senior class	38	
Junior class	34	
Special course	6	
Vacation students		22
Normal graduates	2	
Other teachers	20	
Total		110



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UNIVERSITY OF ILLINOIS
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Greylock, cloud-girdled, from his mountain throne
A voice of welcome sends;
And, from green summer fields, a warbling tone,
The Housatonic blends.

Frances Ann Kreble.

Spirit of Beauty! Let thy graces blend
With loveliest nature all that art can lend.

* * * * * * *

Come from the steeps where look majestic forth
From their twin thrones, the giants of the north
On the huge shapes that, crouching at their knees,
Stretch their broad shoulders, rough with shaggy trees.
Through the wide waste of ether, not in vain,
Their softened gaze shall reach our distant plain.

Oliver Wendell Holmes.

STATE NORMAL SCHOOL

AT

NORTH ADAMS, MASS.

Established June, 1894

CIRCULAR AND CATALOG

FOR YEAR ENDING JUNE 30, 1904

BOSTON
WRIGHT & POTTER PRINTING CO., STATE PRINTERS
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1904

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The State Board of Publication

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Established 1837

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CALENDAR

1904

Graduation

Tuesday, June 21.

First Entrance Examination

Thursday and Friday, June 23 and 24, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 6 and 7, at 9 A.M.

School Year Begins

Training School, Tuesday, September 6.
Normal School, Thursday, September 8, at 9 A.M.

Thanksgiving Recess

Begins Tuesday night, November 22. Ends Monday night, November 28.

Christmas Recess

Begins Wednesday night, December 21. Ends Monday night, January 2.

1905

Second Term Begins

Monday, February 9.

Spring Recess

Begins Friday night, April 7. Ends Monday night, April 17.

Graduation

Tuesday, June 27.

First Entrance Examination

Thursday and Friday, June 29 and 30, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 12 and 13, at 9 A.M.

Thanksgiving Recess

Begins Tuesday night, November 28. Ends Monday night, December 4.

Christmas Recess

Begins Thursday night, December 21. Ends Monday night, January 1.

Sessions are from 9 A.M. to 12 M., and 1.30 P.M. to 4 P.M. Saturday sessions are omitted.

Entrance examinations on the dates given above begin at 9 o'clock A.M., in the assembly hall. Candidates are to be present at the opening and on both days. They should come prepared to stay in September, as the term begins on the following day.

For information about the school address the principal at North Adams.

State Normal School

AT NORTH ADAMS, MASS.

LOCATION

North Adams is distinctly picturesque. The elevations that surround the city are among the most attractive of the Berkshire hills. On the north side are rounded domes of the Green Mountains, on the east the abrupt wall of Hoosac Mountain overhangs the city, while on the south-west border rise the outlines of massive Greylock, the highest peak in Massachusetts.

On the westerly slope of an eminence rising several hundred feet above the river are situated the school buildings. Of the many beautiful locations in Berkshire County, the one chosen is remarkably fine. The near rounded domes, the deep retreating valleys, the winding streams, with all their changing life and aspects, always please and inspire. The noisy hum of the city slightly removed, the beauties of nature close at hand, the duties of student life are made easy and profitable to an unusual degree. The city of North Adams was both wise and generous in its gift of a location. Especially noteworthy are the facilities for out-door study of nature and of industry.

The city is easily reached from the east and west by the Fitchburg Railroad, from the south by the Boston & Albany road. Electric cars connect the city with Williamstown, Adams, and other towns to the south.

BUILDINGS

The school building, the dormitory, and the principal's house in exterior are of yellow brick and white marble, with metal roofs. The school building, in Italian style, is one

hundred and fifty-two feet long, eighty-four feet deep, and three stories and basement in height. It is of slow-burning construction, the floor timbering and roof being carried with steel beams and trusses. The arrangement of stairways, which are iron, gives easy and safe egress.

In the basement are the boiler, engine, fuel, heating, and repair rooms, a lunch room, a room for manual training, and a photographic dark room; in the first story, two reception rooms, cloak, coat, and toilet rooms, and four natural science laboratories; in the second story, the assembly hall, office, libraries, and class rooms for the languages and mathematics; in the third story, the physical and chemical laboratories, the art rooms, and a general class room; and in the attic is ample space for storage.

The interior is finished in oak throughout and provided with modern improvements and facilities. Cabinets, drawers, closets, specially adapted to the needs of the school, are provided in all the rooms. In strength, simplicity, beauty, and adaptation to its use the school building is not surpassed.

REQUIREMENTS FOR ADMISSION

Candidates for admission to any one of the normal schools must, if young women, have attained the age of sixteen years, and if young men, the age of seventeen years. Their fitness for admission will be determined: —

1 By their standing in a physical examination.
2 By their moral character.
3 By their high school record.
4 By a written examination.
5 By an oral examination.

Physical Examination

The State Board of Education adopted the following vote March 7, 1901: —

That the visitors of the several normal schools be authorized and directed to provide for a physical examination of candidates for admission to the normal schools, in order to determine whether

they are free from any disease or infirmity which would unfit them for the office of teacher, and also to examine any student at any time in the course, to determine whether his physical condition is such as to warrant his continuance in the school.

Moral Character

Candidates must present certificates of good moral character. In deciding whether they shall prepare themselves to become teachers, candidates should note that the vocation requires more than mere freedom from disqualifying defects; it demands virtues of a positive sort that shall make their impress for good upon those who are taught.

High School Record

It may be said, in general, that if the ordinary work of a good statutory high school is well done, candidates should have no difficulty in meeting the academic tests to which they may be subjected. *They cannot be too earnestly urged, however, to avail themselves of the best high school facilities attainable in a four years' course, even though they should pursue studies to an extent not insisted on, or take studies not prescribed, in the admission requirements.*

The importance of a good record in the high school cannot be overestimated. *Principals are requested to furnish the normal schools with records of the high school standing of candidates.* The stronger the evidence of character, scholarship, and promise, of whatever kind, candidates bring, especially from schools of high reputation and from teachers of good judgment and fearless expression, the greater confidence they may have in guarding themselves against the contingencies of an examination and of satisfying the examiners as to their fitness.

Written Examination

The examinations will embrace papers on the following groups of subjects, a single paper with a maximum time allowance of two hours to cover each of groups I, II, and

IV, and a single paper with a maximum time allowance of one hour to cover each of groups III and V. (*five papers with a maximum time allowance of eight hours*) : —

I *Language* — (*a*) English, with its grammar and literature, and (*b*) either Latin or French.

II *Mathematics* — (*a*) The elements of algebra and (*b*) the elements of plane geometry.

III *United States History* — The history and civil government of Massachusetts and the United States, with related geography and so much of English history as is directly contributory to a knowledge of United States history.

IV *Science* — (*a*) Physiology and hygiene and (*b* and *c*) any two of the following: physics, chemistry, physical geography, and botany, provided one of the two selected is either physics or chemistry.

V *Drawing and Music* — (*a*) Elementary, mechanical and free-hand drawing, with any one of the topics, — form, color, and arrangement, and (*b*) music.

Oral Examination

Each candidate will be required to read aloud in the presence of the examiners. He will also be questioned orally either upon some of the foregoing subjects or upon other matters within his experience, in order that the examiners may gain some impression about his personal characteristics and his use of language, as well as give him an opportunity to furnish any evidences of qualification that might not otherwise become known to them.

General Requirement in English for All Examinations

No candidates will be accepted whose written English is notably deficient in clear and accurate expression, spelling, punctuation, idiom, or division of paragraphs, or whose spoken English exhibits faults so serious as to make it inexpedient for the normal school to attempt their correction.

THE WESTERN HILLS

JUST OVER THE WESTERN HILLS

The candidate's English, therefore, in all oral and written examinations will be subject to the requirements implied in the statement here made, and marked accordingly.

Special Directions for the Written Examinations

I Language

(*a*) *English* — The subjects for the examination in English will be the same as those agreed upon by the colleges and high technical schools of New England and now quite generally adopted throughout the United States.

1 *Reading and Practice* — A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter and spirit of the books, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of a few topics to be chosen by the candidate from a considerable number set before him in the examination paper. In place of a part or the whole of this test, the candidate may present an exercise book, *properly certified by his instructor*, containing compositions or other written work done in connection with the reading of the books.

The books set for this part of the examination are: —

1903–1905 — Shakespeare's *The Merchant of Venice* and *Julius Cæsar; The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner;* Carlyle's *Essay on Burns.*

2 *Study and Practice* — This part of the examination presupposes a more careful study of each of the works named below. The examination will be upon subject-matter, form, and structure.

In addition, the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong. The books set for this part of the examination will be: —

1903–1905 — Shakespeare's *Macbeth;* Milton's *Lycidas*, *Comus*,

L'Allegro, and *Il Penseroso;* Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

(*b*) *Either Latin or French* — The translation at sight of simple prose or verse, with questions on the usual forms and ordinary constructions, and the writing of simple prose based in part or in full on the passage selected.

The Conference on Uniform Requirements in English for Admission to College, on whose recommendations the foregoing lists of books in English and directions for study are based, advises —

1 That English be studied throughout the primary and secondary school courses, and, when possible, for at least three periods a week during the four years of the high school course.

2 That the prescribed books be regarded as a basis for such wider courses of English study as the schools may arrange for themselves.

3 That, where careful instruction in idiomatic English translation is not given, supplementary work to secure an equivalent training in diction and in sentence structure be offered throughout the high school course.

4 That a certain amount of outside reading, chiefly of poetry, fiction, biography, and history, be encouraged throughout the entire school course.

5 That definite instruction be given in the choice of words, in the structure of sentences and of paragraphs, and in the simple forms of narration, description, exposition, and argument. Such instruction should begin early in the high school course.

6 That systematic training in speaking and writing English be given throughout the entire school course. That, in the high school, subjects for compositions be taken partly from the prescribed books and partly from the students' own thought and experience.

7 That each of the books prescribed for study be taught with reference to (*a*) the language, including the meaning of the words and sentences, the important qualities of style, and the important allusions; (*b*) the plan of the work, *i.e.*, its structure and method; and (*c*) the place of the work in literary history, the circumstances of its production, and the life of its author. That all details be studied, not as ends in themselves, but as means to a comprehension of the whole.

II Mathematics

(*a*) The elements of algebra through affected quadratic equations.

(*b*) The elements of plane geometry.

While there is no formal examination in arithmetic, the importance of a practical working acquaintance with its principles and processes cannot be too strongly emphasized. The candidate's proficiency in this subject will be incidentally tested in its applications to other subjects.

In geometry, the candidate's preparatory study should include independent solutions and demonstrations, — work that shall throw him upon his own resources; and his ability to do such work will be tested in the examination. An acquaintance with typical solid forms is also important, — enough, at least, to enable the candidate to name and define them and to recognize the relations borne to them by the lines, planes, angles, and figures of plane geometry.

III United States History

Any school text-book on United States history will enable candidates to meet this requirement, provided they study enough of geography to illumine the history, and make themselves familiar with the grander features of government in Massachusetts and the United States. Collateral reading in United States history is strongly advised; also in English history, so far as this history bears conspicuously on that of the United States.

IV Science

(*a*) *Physiology and Hygiene* — The chief elementary facts of anatomy, the general functions of the various organs, the more obvious rules of health, and the more striking effects of alcoholic drinks, narcotics, and stimulants upon those addicted to their use.

(*b* and *c*) *Any Two of the Following Sciences, — Physics, Chemistry, Botany, Physical Geography, provided One of the Two is either Physics or Chemistry* — The chief elementary facts of the subject selected, so far as they may be presented in the courses usually devoted to them in good high schools. It will be a distinct advantage to the candidate if his preparation includes a certain amount of individual laboratory work.

A laboratory notebook, with the teacher's endorsement that it is

a true record of the candidate's work, will be accepted as partial evidence of attainments in the science with which it deals. The original record should be so well kept as to make copying unnecessary.

V Drawing and Music

(*a*) *Drawing* — Mechanical and free-hand drawing, — enough to enable the candidate to draw a simple object, like a box or a pyramid or a cylinder, with plan and elevation to scale, and to make a free-hand sketch of the same in perspective. Also any one of the three topics, — form, color, and arrangement.

(*b*) *Music* — Such elementary facts as an instructor should know in teaching singing in the schools, including major and minor keys, simple two, three, four, and six part measures, the fractional divisions of the pulse or beat, the chromatic scale, the right use of the foregoing elements in practice, and the translation into musical notation of simple melodies or of time phrases sung or played.

Importance of Adequate Preparation

Candidates should measure their duty of making adequate preparation not wholly by the subjects selected and the papers set for the admission examinations, but by the larger demands their chosen vocation is sure to make upon them. The more generous and thorough, therefore, the preparation of the candidate, the greater the likelihood of profiting by the normal school, of completing the elementary course on time, of securing employment after graduation, and of doing creditable work as a teacher.

The candidate is advised, therefore, to utilize all feasible opportunities offered by the regular high school course for promoting this breadth of preparation, and the high school should aim to hold the candidate up to the higher ideals of such preparation.

Equivalents

Reasonable allowance in equivalents will be made in case a candidate, for satisfactory reasons, has not taken a study named for examination. Successful experience in teaching will be taken into account in the determination of equivalents.

Division of the Examinations

Candidates may be admitted to preliminary examinations a year in advance of their final examinations, provided they offer themselves in one or more of the following groups, each group to be presented in full: —

II Mathematics
III United States History
IV Science
V Drawing and Music

Preliminary examinations can be taken in June only.

Every candidate for a preliminary examination must present a certificate of preparation in the group or groups chosen, or in the subjects thereof, the form of certificate to be substantially as follows: —

_____ has been a pupil in the _____ School for _____ years, and is, in my judgment, prepared to pass the normal school preliminary examination in the following group or groups of subjects and the divisions thereof: —

_____

_____

Signature of principal or teacher, _____

Address, _____

The group known as I Language must be reserved for the final examinations. It will doubtless be found generally advisable in practice that the group known as IV Science should also be so reserved.

While division of the final or complete examinations between June and September is permissible, it is important both for the normal school and for the candidate that the work laid out for the September examinations, which so closely precede the opening of the normal schools, shall be kept down to a minimum. Candidates for the final or complete examinations are earnestly advised, therefore, to present themselves in June.

TIMES OF EXAMINATION AND ADMISSION

Examinations for admission to the normal school are held at the close of the school year in June, and also at the beginning of the school year in September, as stated in the calendar. Candidates are advised to present themselves at the first examination.

New classes are admitted to the normal schools at the beginning of the fall term. Candidates should come in September prepared to stay, as regular work begins on the day following the examinations. In exceptional cases admissions to classes already formed are allowed at the beginning of the second term.

COURSES

Elementary Course

The elementary course of study is designed primarily for those who aim to teach in the public schools below the high school grade. It comprises substantially the following subjects: —

I The study of the educational values of the following subjects and of the principles and methods of teaching them: —

(*a*) English, — reading, oral and written composition, grammar, rhetoric, English and American literature.

(*b*) Mathematics, — arithmetic and bookkeeping, algebra, plane geometry.

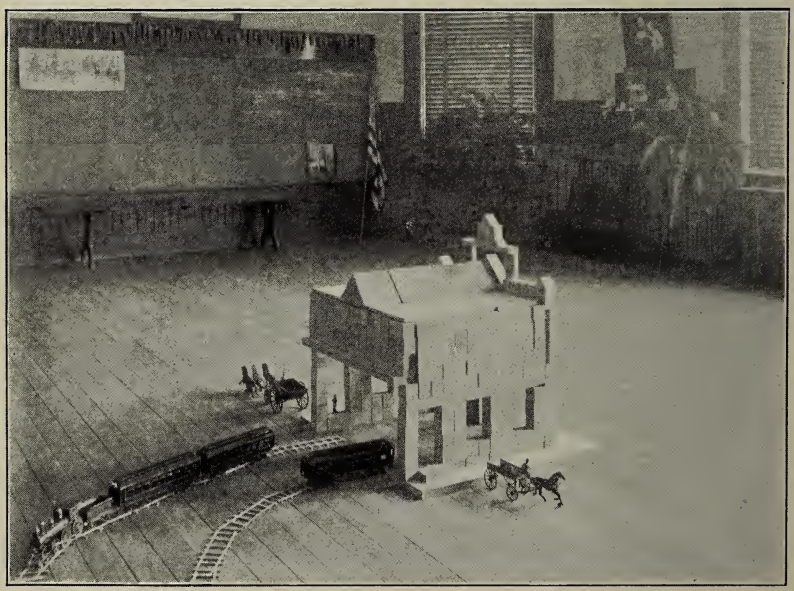
(*c*) History, — history and civil polity of the United States and of Massachusetts.

(*d*) Science, — physics, chemistry, mineralogy, botany, zoölogy, geography, physiology and hygiene.

(*e*) Drawing, vocal music, physical training, manual training.

II (*a*) The study of man, body and mind, for the principles of education; the study of the application of these principles in school organization, school government, and in the art of teaching; the history of education; the school laws of Massachusetts.

KINDERGARTEN — GROUP WORK



(*b*) Observation and practice.

The time required for the completion of this course depends upon the students. It may not exceed two years for those of satisfactory preparation and superior ability; for others, three years are needed to do the work properly. In many cases more than two years are insisted upon. A diploma is given when the course is satisfactorily completed.

A Third Year for Practice and Study

The board of visitors and the principal of any normal school may arrange for its students a third year of study and of practice in teaching whenever, in their judgment, such action is desirable. The object is a more complete mastery of the topics arranged for the regular two years' course, as well as further experience in teaching.

For students signifying at their admission their intention of pursuing a three years' course, it will be arranged so that elective subjects may be begun early in the course, instead of being postponed to the third year.

The Kindergarten Primary Course

The principles which control kindergarten instruction apply not alone to children of three or four years but as well to the whole phase of early childhood, the period extending from two or three to seven or eight years of age. Kindergarten and primary instruction differentiate not in principle, not in general method, but in adaptation of ways and means to the tendencies and growing powers prominent at that period. The process is continuous, the objects studied vary, constructive power widens in application, the use of symbols becomes increasingly prominent. The course as planned and practised trains teachers to work in the kindergarten with due regard to succeeding years of growth of children, and in the primary grade with due regard to previous training and later growth. For such teachers the demand far exceeds the supply.

The kindergarten primary course is a modification of the

elementary course (see page 16) and requires two years at least for completion. The greater portion of the practice teaching may be done in the primary or kindergarten grades as the student may choose.

To enable students to become competent principals of kindergartens a third year of advanced kindergarten study and responsible control has been arranged. Different children attend the afternoon kindergarten and their instruction is given into the charge of graduate students of ability, under the general supervision of the principal of the department. Similar facilities are afforded for study and practice in the first grade primaries. Graduate students of marked ability are paid a small salary, sufficient to pay living expenses, during the third year. A special diploma is given to students completing satisfactorily the graduate course.

The conditions of admission are the same as for the elementary course. In addition, there should be some facility in playing the piano and singing, if the better positions are to be secured. Students pay the cost of material taken away, but this expense does not exceed ten dollars for the course.

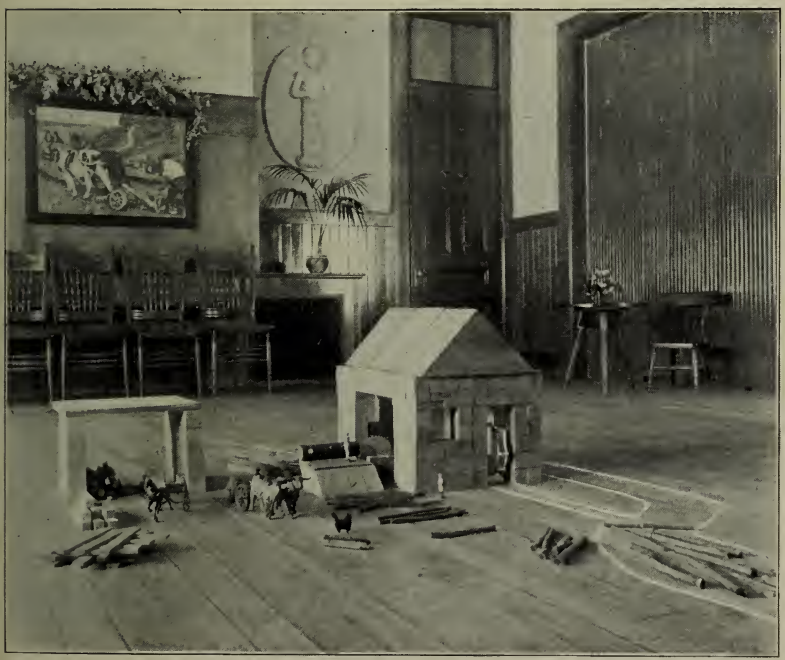
For further details see page 41.

Special Courses for Teachers

Teachers of several years of successful experience in teaching, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal and of the board of visitors, select a course (including the course in psychology and pedagogy), and when such course is successfully completed they shall receive certificates for the same. Candidates are admitted to this course without written examination.

Teachers desirous of spending their vacations at the school are cordially invited to come at any time. Observation work, study of elected subjects, or participation in regular course work and preparation of teaching material, are offered in all departments of the normal and training school. There will be afforded every facility for study, the work being

KINDERGARTEN — LUMBERING



THE SAW MILL

adapted to the wishes and capabilities of applicants, in so far as the permanent needs of the school permit. For subjects see page 23.

Special Course for College Graduates

Graduates of colleges and universities, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal of the school and of the board of visitors, select from the above curriculum of study a course which may be completed in one year, and when such course is successfully completed they shall receive a certificate for the same. Candidates are admitted to this course without written examination.

EQUIPMENT

The four natural science laboratories are arranged in sequence, and by means of specimens and models in well-lighted wall cases is displayed the progression of mineral, plant, and animal life to its final development in man. Banks of drawers are provided in the laboratories for collections of the varieties of each type displayed in the wall cases. At the table are drawers for the working collections and tools distributed to students. In the instructors' laboratories are reserve specimens, models, pictures, charts, and diagrams.

Worthy of special mention are the following materials for study: —

The synoptic and Howell's college collection of minerals and rocks in the mineralogical and geological laboratory.

In the biological laboratories are the Deyrolle plant models, illustrating twelve of the leading families; the synoptical collection of invertebrates and vertebrates; the preparations (wet and dry) showing the habits, homes, and metamorphoses of many insects, the development of a snail, a leech, a crayfish, a horseshoe crab, a spider, a fish, a salamander, a frog, a toad, a snake, and a lizard, displaying all stages of growth, from the egg to the adult form; dissected specimens of a clam, a crayfish, a lobster, a fish, a frog, a lizard, a turtle, a dove, and a rat, displaying sepa-

rately the digestive, circulatory, and nervous systems; aquaria and cages; a series of skeletons, a human skeleton, a life-size manikin, a set of Auzoux models (eye, ear, larynx, brain, pelvis), and preserved vital organs.

In the geographical laboratories are several thousand carefully selected, mounted, and classified pictures, including photographs, engravings, half-tones, bromide enlargements, the Hölzer series of oleographs, and several hundred lantern slides. The models include the Jones eighteen-inch relief globe, Howell's (sixteen feet radius) model of the United States, and a large model of southern New England, the Harvard series of physiographic models. Slated spheres, large and small globes are provided for class and individual use. Three sand-tables, each ten feet by four feet, afford abundant opportunities for sand modelling.

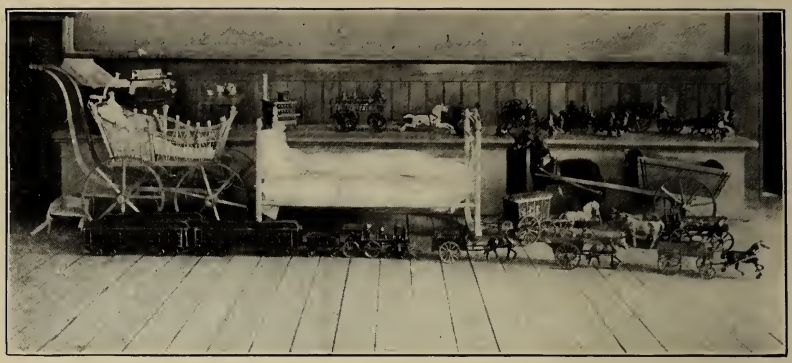
The collection of maps includes two maps of Switzerland, one beautifully shaded to show reliefs and drainage, and the other to show the same physical features combined with political and industrial features; two similar maps of Alpenland; Habenicht-Sydow physical series; Johnston political series; a series of thirty world maps, showing physical, productive, and political features; coast survey charts; topographic maps and folios; a series of maps of Massachusetts, showing relief, drainage, cities, railways, counties, etc.; similar maps of Rhode Island and New Hampshire; a series of maps for study of map symbols; pamphlets, railway folders, magazines, etc., for commercial geography.

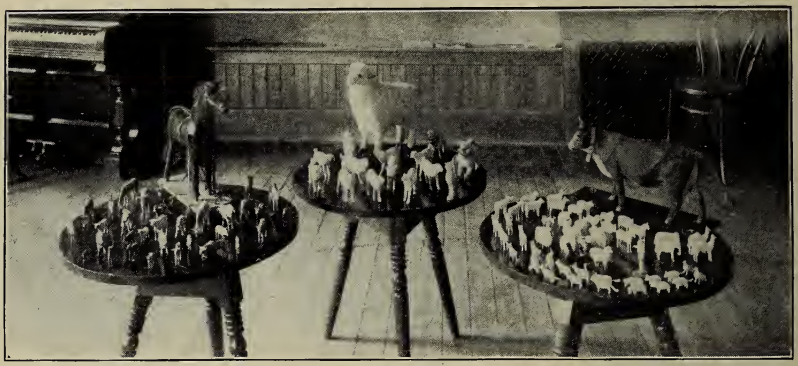
The mathematical department is supplied with collections of models for individual use and class observation in the study of geometry, arithmetic, and algebra in their appropriate development through all grades, including those of the high school.

The historical and literary departments are supplied with several hundred classified pictures and numerous charts.

The art departments are equipped with adjustable tables, models, type, and ornamental forms, pictures, drawings, and casts, illustrative of the phases of modern art teaching.

The library has been selected with especial reference to the needs of teachers. Department libraries are proportionately represented, and furnish excellent opportunities for general reference work and special investigation. Magazines and pamphlets for general culture and departmental study are numerous, the pamphlet division already including several thousand copies.





The three laboratories for physics and chemistry are equipped with modern improvements, and with apparatus for individual experimentation in both qualitative and quantitative work.

The manual training room is furnished with twenty-five sloyd benches and tools for working in clay and wood.

The gymnasium is located in the dormitory and is equipped with the apparatus for the practice of Swedish gymnastics and a system of shower baths. See page 43.

An electric projection lantern and numerous slides have been provided. The lantern can be used in six different rooms, and supplements the work in the various sciences, in literature, and in art.

DESIGN OF THE NORMAL SCHOOL

"The design of the normal school is strictly professional; that is, to prepare in the best possible manner the pupils for the work of organizing, governing, and teaching the public schools of the Commonwealth" (Board of Education, May 6, 1880).

The work of each department is to secure these ends: —

Pupils — The leading motive and continuous effort are to change the pupil's point of view from that of the student to that of the teacher, to inspire him with the spirit of the true teacher, to train him to the noblest ideals and best habits of personality, thinking, and teaching.

Children — The pupil is placed from the beginning of his course in close contact with children, that through them there may be revealed to him such understanding of child-life in general and appreciation of the individual children as will impress upon his mind the necessity of their interests being his chief concern. That schools should be organized to satisfy the needs of children, that school management is the process of securing self-control by the children, that children should be taught, rather than subjects, are truths which are presented as of fundamental importance.

Subjects — The thought of the pupil is carefully directed to the subjects of a public school course. Each subject is analyzed to find its content, its natural or logical order, its teaching order. The appropriate sources of knowledge are

found, the prominent processes of acquisition are emphasized, and corresponding forms of expression exemplified. The knowledge, disciplinary and cultural values of each subject are discussed. Stress is laid upon accuracy of knowledge and the use of each subject as a *means* and not an end in education. Natural and helpful correlations of subjects are made, and the place of each in a course of study indicated.

Teaching — The process of learning is distinguished from the process of teaching, the pupil being led to perceive most definitely that in learning the student concentrates his thought upon the object, that in teaching the teacher concentrates his thought upon the student's mental process of learning. Pupils are led to discover by personal observation that the teaching process consists of two parts, namely, preparatory thought (*i.e.*, lesson planning) and consequent instruction (*i.e.*, teaching). Lesson plans are derived by the pupils from observed teaching and the study of typical plans, and are found to include consideration of (1) aims, that is, needs of the children to be satisfied; (2) right mental activity of the child; (3) appropriate sources of knowledge and interest. Lesson teaching is perceived to be (1) skillful use of sources of knowledge and interest, (2) which use stimulates right activity in each child, (3) and enables him to satisfy his needs. Pupils, by practice in writing lesson plans and in teaching children in accordance with the plans, become certain that intimate knowledge of children and thorough lesson planning are, together with the personality of the teacher, the vital conditions for successful teaching; that lesson plans may free the teacher of the burden of the subject, and enable him to attend discreetly and heartily to the needs and interests of the children. Similarly, the place and purpose of recitations, drills, examinations, and criticism are brought before the pupils for consideration and judgment.

Organization — The principles underlying the organization of a school are arrived at by the pupils by direct study of the training school and other schools they have experienced, by consideration of children's needs as individuals

and as members of society, and by use of the experience of teachers and other educational authorities.

Government — Pupils are led, by review of their own experiences in conforming, obeying, and controlling, by the testimony of others, by their knowledge of children, by their efforts in the training school, and by their study of psychology, to understand the relations between knowing, feeling, and doing, to value and use the instinctive reactions, and to attempt to form habits in themselves and children of right self-activity for the sake of self-development and service to others.

The school laws of the State receive due and appropriate study, in connection with the consideration of organization, government, and the history of education.

Order of Studies in the Elementary Course

Junior Class		Senior Class	
First Term	Second Term	Third Term	Fourth Term
Drawing 3	Drawing 3	Drawing 3	–
Music 4	Reading 3	Grammar 3	Reading 3
Manual training 2	Gymnastics 2	Gymnastics 2	Gymnastics 2
Language 1	–	Literature 3	Literature 3
Chemistry 4	Physics 4	Geography 4	Geography (half term) 5
Mineralogy 2	Botany 2	Zoölogy 2	History of education, school laws (half term) 5
Physiology 3	–	History 4	
Geometry 4	Algebra 4	–	Psychology and pedagogy 5
Penmanship	Arithmetic 4	–	–
Child study: — 4 Individuals Groups	Observation of teaching and control. Assisting 4	School organization 1 Teaching at training school 4	School management 1 Teaching and control (half term) 10
Kindergarten course omits manual training, chemistry, and part of geometry	Kindergarten course omits algebra and part of the arithmetic	Kindergarten course omits drawing and history	Kindergarten course omits geography

Note. Figures indicate the number of periods per week.

THE RANGE OF THE SUBJECTS

The professional work is indicated in general on pages 21–23, under the topic, "Design of the Normal School," but applies in detail to each of the subjects analyzed and described as follows. Accuracy and fulness of scholarship are strenuously emphasized.

Psychology and Pedagogy

The study of children is continuous throughout the whole course. Individual children are carefully observed to ascertain individual physical, mental, and moral aptitudes and defects, in order that each child's needs may be satisfied. Groups of children — the healthy and the sick, the able and the weak, the bright and the dull, the tidy and the slovenly, the leaders and the followers, the good and the bad, etc. — are found, and their relative numbers and importance estimated, that justice may be done to all. Based on these and similar observations made elsewhere are the students' conclusions as to native reactions, behavior, self-control, and tact.

In their study of individual subjects of the course, students are taught to recognize the elementary processes of acquisition, the emotions aroused, the importance of interest, and the volitions resulting. The sources of knowledge, the stimuli of interest, the mental processes appropriate to the several subjects, and the conditions in general for right mental activity in each subject, are learned as individual facts.

In the observation and practice of teaching, effects of the teacher's knowledge of children, of subject, of fitness of mental process, of the influence of tact, of the possession of right habits are discerned.

During the last term of the course, the systematic study of man as an educable being is based upon the child study, the analysis of subjects, and the observation and practice of teaching previously described. The purpose of this course is to organize into attitude and habit, as thoroughly as possible, the following propositions.

The present characteristics of body and mind in men are evolutionary products.

Every child is the result of countless generations of developmental changes both in body and mind.

Growth includes fundamentally the repetition by body and mind of the essential features of race progress. The phases of life — infancy, early childhood, later childhood, adolescence, adult life, and old age — are racial metamorphic periods, necessarily with distinctive characteristics.

The reflexes, instincts, and forms of consciousness of childhood are noticeably hereditary habits or tendencies, and are relatively stable.

Individuality is partly inherited, partly acquired.

Environment includes the inherited and acquired characteristics of one's own body and mind, as well as the physical surroundings of outer life.

Education is possible and necessary because a child is born with relatively few organized habits.

Education is under the immediate control of others for nearly one-third of life because of the ever-increasing variety and complication of experiences necessary to obtain higher success in living.

Education never ceases, and should be intelligently adapted to the characteristic needs of each phase of life.

Professional preparation for teaching is coming into conscious intelligence, and correct habits of directing the inherited tendencies and habits of the learner, under the influences of improving environment, into the acquirement of ever-increasing power of truth, beauty, and goodness, expressed in human conduct.

Professional preparation is the organization into habits of thought and practice (1) of discriminating knowledge of the evolutionary progress of man, (2) of the present physiological functions, (3) of the present mental functions, (4) of the interdependence of body and mind, (5) of the conditions necessary for right activity of body and mind. The present physiological functions of man are studied under the topics Physiology and Zöology and are reviewed in this course. The present mental functions are consciously investigated by the systematic study of children and adults, individuals and groups; by introspection; and by the testimony of others. The conditions of right activity for learning and teaching are apprehended by studying the ways and means in which the needs of children are satisfied; by analysis, organization, and correlation of knowledge into conditions favorable to mental growth; by the application of principles during the practice of teaching.

Principles of psychology and pedagogy are apprehended and

appreciated because of their guidance of thought processes, their productiveness of interest and certainty, their determination of method. The study of psychology and pedagogy is for the illumination and inspiration of teaching.

School Organization and Management

These subjects are studied in a manner very like that described above. Observation and induction are the major portion of the process. The training school serves as the model of a school for children, the normal school as one for youth.

History of Education

The aims of this course are: —

1 To discover the progress of educational theory and practice.

2 To discuss the aims, method, and result of each.

3 To discuss the meaning and value of principles of education as evolved.

4 To find one's need of gaining inspiration from others.

5 To stimulate the desire to know the practice of other individuals and nations.

6 To liberalize, — foster the creative rather than the imitative spirit.

In the conduct of this course each pupil is provided with a brief compendium of the history of education as a foundation for his work; and a departmental pedagogical library is provided for reference use. Each pupil outlines the assigned topic for oral or written recitation, and free criticism follows. Frequent assignments of special subjects for investigation and report are made. Whenever feasible, educational theories and practices are illustrated in the conduct of the regular recitation.

School Laws of Massachusetts

The purpose of this course is to make the students familiar with the principal powers, duties, and relations of teachers, pupils, and other parties directly concerned in school work as defined in the Revised Laws. To this end, brief consideration is given to law, — its relation to custom, as subsequent rather than precedent; its purpose, in defining and unifying practice; its kinds, — permissive, compulsory, and prohibitory. The more important laws are then analyzed; and the several powers and duties granted and forbidden to each of the parties finally summed up and classified.

Nature Study and Natural Science

In the work in the natural sciences there are sought constantly the knowledge, the interest, the training needed by those who are to teach nature study and related subjects in elementary schools. Hence the aim is to cause the prospective teacher to possess and to be able to cultivate in others "what may be termed the elementary equivalent of the genuine scientific spirit, so that out of his native fondness for things about him shall come an enthusiastic truth-seeking, reverent attitude toward nature," an appreciation of the beauty, harmony, and inviolability of nature's laws; together with some mastery of the means for subduing nature's forces and utilizing them for his own protection and development and for the social good.

Mineralogy — Each student is assigned a place in the laboratory, and is provided with apparatus and typical specimens (see "Equipment," page 19).

He is taught to recognize and name a considerable number of minerals by practice in distinguishing their physical properties. A smaller number of the most common and useful minerals, with their varieties and the rocks in which they occur, are studied in greater detail. Special stress is laid upon such as can be found in the neighborhood of the school, and upon the uses of mineral bodies for manufacturing, building, and decorative purposes.

Students are led to see the value of such work in developing the power and the habit of close observation, critical comparison, and nice discrimination; also in cultivating interest in common things, and utilizing the collecting instinct of children for their education.

A few chemical tests are taught, and other interesting correlations made with the study of chemistry going on at the same time.

Each student is assigned a topic for special research, the results of which are presented to the class. This gives training in the use of books and in the orderly arrangement of subject-matter for teaching purposes. Each is required to make a collection of minerals and rocks of the region, and to illustrate the assigned topic; and field excursions to several interesting localities are made for this purpose.

Chemistry — The following are some of the topics considered: nature of chemical change, oxygen, nitrogen, air, hydrogen, water, the forms of carbon, carbon dioxid, coal, illuminating gas, com-

bustion and flame, foods, respiration, fermentation, manufacture of lime, iron and glass, acids, alkalies, salts.

Each student prepares simple apparatus and performs experiments, being guided to the proper interpretation of the observed results by printed questions and directions. Ability to use experiments in teaching is especially sought. Those who work faster or who have had the subject-matter before are given extra exercises, adapted to their ability, to present before the rest of the class.

The laboratory work is followed by class discussions, and notes on each experiment are written, which are expected to be in good form, correct in English, and to cover the following points: —

1 Purpose of the experiment (topic to be illustrated).

2 Apparatus (what we use).

3 Experiment (what we do).

4 Results or observations (what we learn by the senses).

5 Inferences and explanations (what we learn by thinking, reading, etc.).

6 Applications (what things in every-day life, in nature, in other studies, the experiment may be used to teach or illustrate).

Special attention is given to the applications of experiments in explaining the facts of common life, or of other studies, such as mineralogy, human physiology, and nature study. Visits are made to the gas works, a lime kiln, and an iron foundry.

Physics — The aims and the method are the same as in chemistry. Portions of the subject are selected, which, it is thought, will be most useful to teachers in elementary schools, such as: pressure in water and air, with applications to city water systems, artesian wells, hydraulic press, specific gravity methods, barometer, pumps, siphon, breathing, etc., nature, properties, and states of matter; simple machines, and the conservation of energy; heat, and its manifold applications. In addition to the individual laboratory work, students perform assigned experiments before the class, and question their classmates about the results and their explanation. Having gained some knowledge of physical principles, some power to reason from effect to cause, some skill in experimentation and in questioning, and having learned how to study and to plan lessons, students conduct similar exercises (in other portions of the subject) in connection with other studies and in the training school.

The school is well supplied with apparatus; but special pains

is taken to teach students to improvise, from such materials as may be gotten anywhere, inexpensive apparatus, which they may take into the schools to illustrate the simpler facts of physics, physical geography, and human physiology.

The work is chiefly qualitative, but wherever possible computations based upon measurements made in the experimental work are the means of correlating physics and mathematics and of securing greater power in both.

Drawings or diagrams are required when they can be made to aid in the expression of conditions and results.

Botany — Plants are studied as living, breathing, working beings, with structure adapted to their functions and their surroundings. Hence plant physiology is given a prominent place and experiments are performed by members of the class to show how plants live and grow. The work is begun in the winter, with twigs and buds of trees in the hands of each pupil. These are put in water, and their development watched. Each student plants seeds of squash, bean, pea, and corn, which are cared for in the laboratory, and the morphology of the seeds and seedlings is made out. Drawings, properly labelled, to illustrate gross structure, are asked for, which, though they be diagrammatic, will not merely suggest but will express accurate conceptions of the real construction of the object represented.

The cycle of life-changes from seed to seed again is traced, such topics as the following being used : —

The conditions of germination
Storage of food in seeds, etc.
Roots and root work
Relation of plants to the soil
Stems and their uses
Buds and what they promise
Leaf arrangement, with reference to light, air, water
Food of plants, — how taken, how used
Leaf structure and work
Nature and uses of floral organs
Fertilization, pollination and cross-pollination
Fruits, and their uses to the plant
Seed dispersal (what plants do for their young)
Relations between plants and animals
Uses of plants to man and other animals

How plants protect themselves

The struggle for existence among plants

One or more topics, with references to text-books and reference books, are assigned to each member of the class, who prepares an outline of the subject-matter, collects material to illustrate the same, teaches or presents a portion of the subject to the rest of the class, and prepares a plan for teaching a similar lesson to children.

As the season allows, out-door excursions are taken, to study plants alive and at home. The work is confined almost wholly to the higher plants, for lack of time and because microscopic work is considered to be neither suitable nor feasible for elementary schools. Prepared slides are shown by the compound microscope, or projected on the screen.

Zoölogy — A series of typical animals is so studied as to make out their plans of structure and the adaptation of their structure to habits and surroundings. Related forms are compared with these, and some idea of classification is developed. Each student examines both live and preserved specimens, furnished by the school or collected by himself, being guided by definite directions and questions for thought. The facts observed are expressed by labelled drawings and by written statements.

The use that may be made of the material in giving animal lessons in elementary schools is constantly kept in mind. Hence such forms as are easily obtained in the interior are selected, and very little dissecting or microscopic work is required.

The work begins in the fall, with the study of insects, such as locusts and crickets, dragon flies, house flies, butterflies and moths, honey bees and wasps. Their life history is traced by means of a series of imported preparations, showing all stages from egg to adult (see "Equipment"), and also, as far as possible, by means of live specimens.

Other animals studied are the lobster, the spider, the centipede, the millipede, the earthworm, the fish, the frog and its development, common birds, and mammals.

Special topics are assigned for library work, lesson plans are prepared, and teaching exercises conducted as in botany.

Physiology — The course includes so much of anatomy as will make vivid the harmony between structure and function, so much of physiology as will emphasize the fundamental importance of

the vital functions, and so much of personal hygiene as should be practised by one knowing his body as a physical organism, the abode and instrument of his mind, and respectful of it because of its possibilities in use, strength, and beauty.

The range of the subject is: The human body as a whole; its external and structural parts; general plan of the body; the general structure of the limbs and walls and the different systems of the body, — digestive, absorbent, circulatory, respiratory, secretory, excretory, osseous, muscular, and nervous; their functions; the conditions of health. School hygiene, sanitation, and emergency lessons receive proportional consideration, our own environment furnishing ample and proper illustrations. The kind of work is distinctly objective and practical.

Gymnastics — Health of the individual is the chief and constant consideration. Physical culture is induced by seeking to obtain ideals of physical vigor, co-ordination, and grace, by means of volitional, formal exercises, and spontaneous games, and the habit of physical expression of noble ideals. The Swedish system of gymnastics is taken as the basis. Adaptations to needs and interests of children, youth, and adults are impressed vividly.

Instruction in the theory of gymnastics is correlated closely with the study of the human body, as indicated under physiology. The physiological basis causes the importance of gymnastics as a need of personal health and as a feature of public school education to be acknowledged heartily, and leads to zealous action.

The gymnasiums are well ventilated and lighted, fully equipped, and conveniently adapted for formal exercises, games, and athletics.

Geography

Geography is knowledge of the earth as the home of man.

Elementary geography is knowledge of the appearance, activities, uses, and distribution of geographical objects. This includes the three phases of work common to all studies: (1) the acquisition of ideas from the objects; (2) the expression of these ideas objectively (*e.g.*, by modelling, showing similar objects, by drawing and by symbols); (3) the reading of models, pictures, and symbols to recall and acquire ideas.

The main divisions of elementary geography are: —

Preliminary Study of Geographical Objects — This work is properly a section of nature study, and is treated as such. It in-

cludes: (1) the observation, comparison, grouping, and reasoning concerning local objects; (2) the expression of this knowledge by modelling, drawing, and the use of symbols, especially *geographic symbols;* (3) the imagination of geographical objects and relations different from those at home, by the aid of pictures, text, and conversation; (4) the reading of maps of his own locality, of distant regions, especially of those places of which he has seen pictures. In this phase of imaginative work much emphasis is given to thinking the appearance and activity of the objects represented; location is of secondary importance.

This preliminary study includes the different elements which enter into child life, — physical, biological, and sociological. The elements most common in children's experience are the industrial and commercial, and caution is needed lest the teaching of the physical element receives undue emphasis. The physiographic conditions are but the basis of biological and sociological aspects.

The Earth a Whole — It is the first presentation to the imagination of pupils of the simple world-wide views of the earth as the home of man. Each pupil is led to feel: —

1 That the earth is a whole, a unit, having qualities or powers as a whole differing from the qualities of its parts.

2 That each part, land, water, atmosphere, and life, has its own qualities, differing from the qualities and powers of all other parts.

3 That the several parts and the whole are all *working* together to make the earth a home for man, and the means of his progress to better, nobler, higher life.

The Continents — The order and purpose in the study of each continent are to: —

1 Find what part of the world ridge, of the world drainage, of the world climate, of the world productions, of the world races, each continent includes. This is review work.

2 Find such new or peculiar details of relief, drainage, climate, soil, productions, and people as are necessary to understand and appreciate the work of the continent and its inhabitants in the development of the people of the continent.

3 Think the continent anew in its relation to the world ridge, yet with more completeness, in order to perceive more clearly the special use and influence of each continent in the development of the whole human race, and to emphasize the interdependence of continents and of people.

Especially the dependence of all life forms on geographic conditions is made prominent. So, too, the influences of past and present physiographic phenomena are noted.

The Leading Nations — The people, not the territory, are the central thought. The territory is the place of past and present activities. The relations of the geographical objects in such a territory as used and modified by man in his progress are essentially historical. Hence geography and history are inseparable in this division of the subject. The general order of thought and the aim in the study of the nations is to: (1) trace briefly their past progress; (2) find the natural advantages or disadvantages of geographic conditions; (3) find intentional use made of geographic conditions to facilitate progress; (4) ascertain with considerable fulness their present status and progress; (5) discern international relations and their effects; (6) measure their respective usefulness to mankind.

The State and its Neighbors — The study of the State is not to follow the study of nations, but from the beginning and at every stage of the course such facts as pertain to the State are culled and emphasized. At the end of the course the geography and history of the State are reviewed with great care. The teaching of the geographic conditions of the territory of the State, of the past and present usefulness of her citizens, and of the opportunities to be grasped, arouses in every pupil such a love of country, such a pride in the State, as stirs him to make her more glorious even in the future than in the past.

The City or Town — The current thought is as for the study of the State. Local geography and local history are inseparable. The past and present place and usefulness of the city or town in any or all the relations of life are taught, with the purpose of making every child an interested, intelligent, active citizen.

Trips — Nature and man very materially add to our sources for study in this vicinity. Erosion, including the formation of limestone gorges, caverns, sinks, and a natural bridge, and other forms of water action in stream and pond, are abundantly illustrated; glacial smoothing, scratching, and deposition are prominent; and the processes of mountain building and destruction are easily demonstrable.

The industries of our manufacturing region are unusually varied, and afford admirable basis for study of industrial, commercial, and social conditions.

In order to realize these opportunities various trips are taken by the class each year. About half of these occur during school hours, and are required; the remainder, mostly Saturday excursions, are voluntary and well attended. None are made exclusively geographical, but features of biological, physical, geological, historical, governmental, and literary interest are carefully observed and discussed. The scope of observation is indicated by this list of places visited: Adams (South Hoosac) valley; Beaver (North Hoosac) valley; natural bridge; Greylock foot-hills and cascade; Greylock; cotton, woolen, paper, grain mills; Arnold Print Works; shoe shop; newspaper office. Cutlery works (Turner's Falls), Deerfield and Connecticut valleys, Deerfield, Concord, Lexington, Cambridge, Boston, and Plymouth in 1900; New York, Philadelphia, and Washington in 1901; New York, Philadelphia, Gettysburg, and Washington in 1904.

History

The course in history occupies the first half of the second year. The central thought of the course is the development of our people and institutions and the growth of present-day problems, leading to intelligent outlook upon the future.

The strong factors in this evolution of the nation, as of the individual, we believe to be three: —

(*a*) Inheritance: the influence of social and political ideas and customs, gradually evolved during the past.

(*b*) Environment: influence of the place, which conditions occupations, life, and even thoughts and ideals. In this is the key to the correlation of geography and history.

(*c*) Personal reaction or inventiveness: this modifies even environment and inheritance.

To see the force of these factors, the first part of the course is devoted to English history. Through political documents and social and religious movements the development of the English nation, with its ideals and political institutions, is traced, in order to understand the people who founded the American nation and the ideas with which they came.

The greater emphasis is given to the development of our own nation. The influence of new environment is shown from the very first in the new living and thinking forced upon the early colonists in the wilderness; the same processes continued as the pioneers

pushed the frontier westward. As the first settlements grew larger, conditions of life and occupation changed and culture grew; this evolution, like the first frontier, moved westward; hence successive waves of frontiers — those of the Indian, fur trader, pioneer, farmer, manufacturer — are discovered to have moved westward. To-day we are in each section of the land approaching that phase of development where the occupations are best suited to the geographical character and possibilities.

In tracing this development we find the key to the political, financial, and social questions of each epoch of our history, and a guide to understanding present conditions and the outlook for the future. Throughout the work the emphasis must be laid, not on facts and dates, but on relations of facts and development.

It is our aim through this study to find the value of history as a school subject, and to find the way of studying and teaching the several periods, — discovery, settlement, war, administration, development. The professional side of the work is realized through observation of lessons, planning of original lessons, and practice in the training school.

Mathematics

Geometry — The scope of the work is: (1) geometric magnitudes, illustrated by models; (2) relations, measurements, drawings, descriptions, definitions; (3) study of plane figures and discovery of theorems; (4) study of solids, discovery of theorems, measurements (according to time); (5) objective and mathematical demonstration; (6) occurrence of geometric forms in nature and architecture; (7) conception of the geometric magnitudes as real, non-material, accompanying all preceding steps.

Algebra — The scope of the work is: (1) generalizations leading to laws of number, as exemplified in six fundamental processes, — addition and subtraction, multiplication and division, involution and evolution; (2) use of axioms in solving of equations, simple and quadratic; (3) deducing of formulas, their interpretation and application, as in factoring, transformation of fractions, binomial theorem, etc.

Arithmetic — The scope of the work is: (1) number, as applied to measured quantity, as length, area, volume, capacity, weight, money values, time, etc.; (2) consideration of objects adapted to number teaching; (3) drawing, cutting, building, to find and illustrate values in relation to unit of quantities, in relation to each

other; (4) six fundamental processes (see algebra), laws of number as used in each; (5) application of processes in mensuration, proportion, forms of percentage, etc.; (6) applications to actual conditions of life, — industrial, commercial, governmental, social.

English

The general aim of the work in the department of English is so to acquaint the student with the many forms of English expression as to impress him with the importance of the teaching of English. Study of the student's personal experience in learning and that of children in the grades is made the basis of all study of methods. The course comprises language, grammar, composition, literature, and reading. The subjects are correlated as much as possible.

Language — The order of teaching is: (1) the significance of language; (2) what it includes; (3) the various means by which the language power and knowledge of the child are increased in the lower grades; (4) the methods and values of the forms of teaching, together with devices. Stress is laid upon story-telling, the use of pictures, letter-writing and the principles of composition. Constant practice by the student in the doing and teaching of these things is required.

Grammar — The study of scientific grammar is pursued for its disciplinary value to the student, — for the purpose of training the mind into thinking abstract relations. The discovery of a logical order in the teaching is made, and from the knowledge thus gained elementary grammar is directly derived by the student.

Composition — The aim in this work is to lead the student to appreciate worthy diction and style, as exemplified in our masters of English; to recognize, through the analysis of various pieces of literature, the essential elements of good composition; and to apply this knowledge to improve his own writing and speech.

The study comprises: (1) the composition as a whole; unity of material and of aim, unity of the paragraph, proportion of parts, simplicity of structure, sequence, and movement of thought, transitions, introduction, and conclusion; (2) the paragraph: factors and modes of development; (3) the sentence: conciseness, combination of related parts, punctuation, variety, choice of words, euphony, emphasis, period, climax, balance.

Literature — The value of literature as one of the most important factors in spiritual education is emphasized. Sympathetic and

appreciative rather than critical study is made of various literary productions. The aim in this course is to inculcate a desire for reading, to cultivate a taste for good literature, to uplift by giving fresh inspiration and new ideals of life. The method is reading and studying of the best things that have been written, rather than studying *about* literature and authors. The history of literature and the biography of authors are studied in so far as will aid in accomplishing the purpose of the course.

Lists of poetry, fiction, and essays are presented to the student, from which he selects a required number. The reading is carried on and reports are made to the class according to definite outlines.

Some of the masterpieces of English literature are read not only for the culture thus afforded, but for the purpose of comparing the past with the present in matter and technique; of finding out how much of the material of the past is used to-day and under what modifications; of fixing standards of judgment based upon wide reading.

Reading — The aim in this course is to give the students a knowledge of the principles that underlie the art of expression, and to develop the power to use these principles in their work.

Vocal expression is the co-ordination of mind, voice, and body in the utterance of thought and feeling, hence the training is in these directions.

Mind training — Clear thinking is the first condition of clear expression. Various selections are studied to develop the ability to think clearly the ideas and their sequence as expressed in the text. To this end narrative, descriptive and conversational prose, and lyric and dramatic poetry are studied progressively. Especial emphasis is laid on story-telling and extemporaneous speaking as means of developing in the students the power to express what they have to say simply, directly, and naturally. Myths, legends, folk-lore tales, and numerous other stories, suitable for use in teaching the various branches in the different grades, are prepared and the best means of presenting are discussed.

Voice training — Exercises are given to free the voice from limitations and acquired faults, to bring out its latent strength and purity, and put it in such a condition that it may adequately meet the demands made upon it in teaching and speaking.

Body training — Only as much of this work is given as will enable the students to bear themselves well before their schools or audiences.

Drawing

The purpose of our art study is to consider the principles governing good art, to study and enjoy examples of art embodying these principles, to give an appreciation of harmonious coloring, and to feel the connection existing between the arts, music, literature, and painting, realizing that all are governed by the same general principles. Students should be alive to see and enjoy whatever is beautiful in the world about them, and in their own work to realize that "art is simply doing whatever one has to do in the best possible way."

The class work is grouped under the following heads: Appearance, — perspective elements, pictorial drawing (single objects, grouping, and composition). Structure, — elements of form, elements of beauty, structural design. Enrichment, — color, elements of ornament, decorative design.

An abbreviated course in the history of art is carried on, parallel with these subjects, and the pupils are encouraged to collect reproductions of the world's best examples of architecture, ornament, sculpture, and painting.

The pupils use the following mediums of expression: watercolor, pencil, charcoal, and blackboard crayon. Blackboard illustrative work from memory along all lines of work studied is an important feature of the course.

Music

Tone perception: listening to voice and piano; scale tones and exercises by imitation; writing from oral dictation.

Tone production: securing softness, sweetness, purity of tone; developing appreciation of beauty of tone; study of child voice.

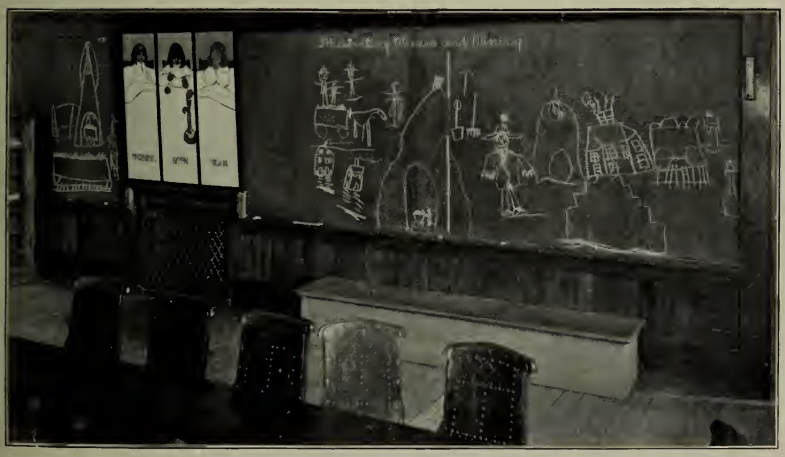
Sight reading: daily practice in music; thinking, silent and oral reading.

Analysis of form: developing understanding and appreciation of musical form; most important forms analyzed; illustration by voice and piano; application in appropriate phrasing, etc., in oral work.

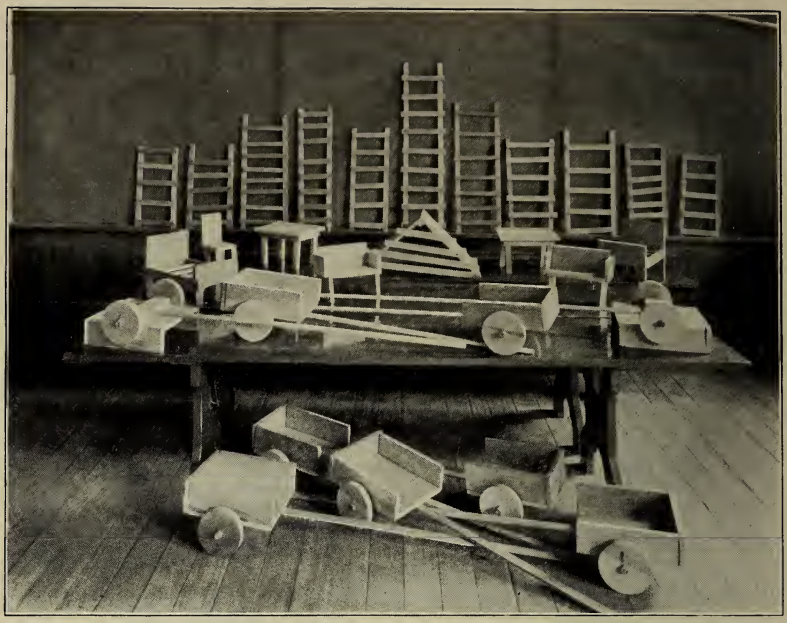
Melody: laws illustrated; study of melodies from the symphonies, sonatas, oratorios, operas, and of the best songs; writing of original melodies; study of children's songs, with reference to selection for school use.

History: lives of eminent composers; illustrations, vocal and instrumental, to gain familiarity with types and cultivate taste for music.

KINDERGARTEN — COAL MINING



THREE CHILDREN'S DRAWINGS



KINDERGARTEN — WOODWORKING

HARVESTING

Interpretation: piano playing for pupils once a week in normal school and training school; explanations of graded selections illustrating rhythm, melody, harmony, form, and adaptation to expression of emotion.

Chorus work: practice twice a week in chorus reading; a musical program given at Christmas and Easter.

Glee club: practice twice a week; two concerts given in the year; singing for pupils in training school.

Piano music and practice: The collection includes works by eminent composers, graded and progressing in difficulty to Beethoven's sonatas and Bach's fugues. A duplicate collection is in use in the training school, and a smaller collection is in the music room of Taconic Hall. Three pianos are available for students' practice.

Manual Training

The term manual training means educational handwork, — the cultivation of the hand to express the ideas of the mind. The aim is the development of the individual through self-activity in manual expression. The work of the children consists of designing, modelling in clay, simple construction in wood, weaving, basketry, sewing, embroidery, and printing, as the ability of the pupil permits. The problems increase in difficulty as the individual gains in ability, the purpose throughout being, so far as circumstances permit, to suit the work to the needs of the individual. Relative difficulty and interest are considered important factors. The normal students follow, as far as time permits, the line of work indicated for the training school, the object of the work not being to prepare teachers of manual training, nor to furnish an adequate course for individuals, in whose previous education hand training has not played an important part, but rather to demonstrate the value, and lead students to appreciate the importance, of handwork as an active factor in early education, and to prepare certain pieces of apparatus for teaching purposes.

TRAINING SCHOOL

On an adjacent lot is a modern brick building, containing twenty class rooms, an assembly hall, two large basements, playrooms, a woodworking room for the kindergarten and first primary grades, the motor and boiler rooms. In an

annex is the gymnasium, forty by seventy-two feet, supplied with Swedish apparatus sufficient for the accommodation of classes of forty pupils each. All grades are represented, beginning with the kindergarten and extending through nine years of primary and grammar work to the high school. In each room is a regular teacher in charge of a class not exceeding forty pupils. The principal is free for teaching in any grade, and for the direct observation and instruction of the normal students.

Unusual opportunities are afforded for the study of children and the practice of teaching. Students begin their work in this department immediately upon their entrance into the normal school, and continue it regularly throughout the course. The rapidity of progress through the various stages of the training school work depends on the ability and previous experience of the student. Definite oral instruction and printed schedules guide the observation of children individually, in groups, in classes, and the observation of teaching and control. In general the order of work is as follows: —

First Year — First term: observation of individual children and of groups begun. Second term: observation of the class for prevailing and peculiar qualities; observation of teaching and control emphasized.

Second Year — Third term: study of school organization and management, and assisting in teaching and management. Fourth term: practice in teaching, the amount of responsibility conferred depending on the ability of the student.

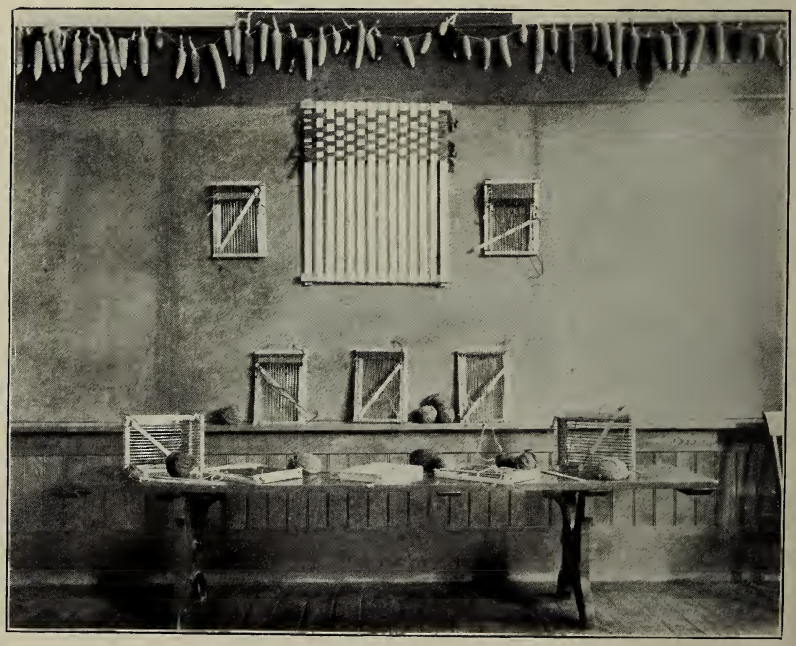
Third Year — Responsible charge of classes, elective work. Students who have taught successfully before entering are given opportunities for practice in teaching and disciplining as early in the course as their abilities warrant.

Close and appropriate supervision and instruction are given students by the regular teachers of the several grades and by the principals of the various departments, thus ensuring reasonable progress to students requiring extra opportunities in the practice work of teaching.

GYMNASIUM

TRAINING SCHOOL (MARK HOPKINS SCHOOL)

KINDERGARTEN — PRIMARY COURSES



Equipment

The training school is bountifully supplied with the means of instruction, and the resources of the normal department are always available for daily use. Class libraries are located in each room, thus stimulating pupils to swift and sure lessons in order to get time to read in school, and encouraging them to discriminate as to home reading.

The *kindergarten department* occupies a suite of three sunny rooms which can be opened into one. The equipment is worthy of special mention. Froebel's spirit and principles are followed rather than the letter.

Toys — The collection is large and represents all the industries requiring the use of animals, conveyances, household apparatus, tools, means of production, and other forms of social life. The toys are used in free play before the opening of the session, and in guided play as occurring in the program.

Sand-table — This is an important factor in representing the conditions of industrial life. The work, whether free or guided, is distinctly constructive, collective, and increasingly co-operative, and affords the sympathy, help, and inspiration which only work with other children can give.

Enlarged Material — The building gifts are in three sizes — one inch, one and one-half inches, and two inches. The children because of their greater dexterity and larger products with the enlarged material discarded the one inch material, and that is found of real value in the early primary grades. The one and one-half inch size is used for table work, the two inch material for building on the floor. Similarly, enlarged sticks, tablets, peg boards, and folding paper, etc., are in use.

Weaving — For reasons mentioned above children do most weaving on large wooden frames, with cloth or worsted. Some very simple work is done with raffia.

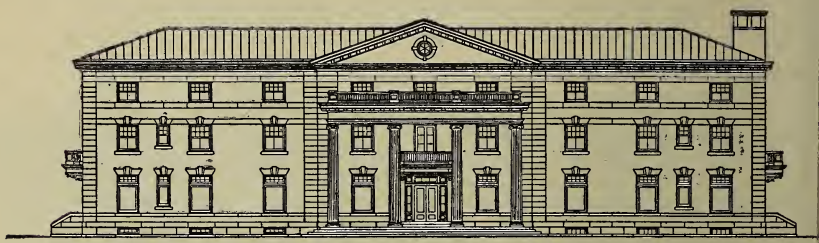
Woodworking — In a corner of the basement a small workshop has been established. Small saws, hammers, and screw drivers are used in making ladders, bed frames, carts, tables, coops, etc. Children also stain the articles made.

Gardening — A large plot of ground is arranged in beds, planted,

and cared for by the children. Flowers and vegetables are gathered in season and used for satisfying friendship and interpretation of life.

Cooking — The vegetables grown in the garden are cooked in the school-room, corn is popped for food and decoration, maple syrup is boiled to sugar or wax, etc., — and all to give glimpses into the meaning of life and to cultivate the simple, vital virtues.

Rhythm — Special effort is made to stimulate the perception and expression of rhythm. Conversation, prose, poetry, music, pictures, and design are all used at appropriate times. Music is chiefly used; the children enjoy it most, respond to it most readily, obeying its changes promptly without aid of words from the leader. Natural movements, such as walking, hopping, running, skipping, jumping, sliding, skating, etc., are performed with their natural rhythm, with and without music, resulting in marked freedom and control of bodily action. Rhythmic games, imitations of children's plays and of animal movements are constantly u ed in teaching obedience, self-control, co-ordination, and concentration.



EAST-ELEVATION.

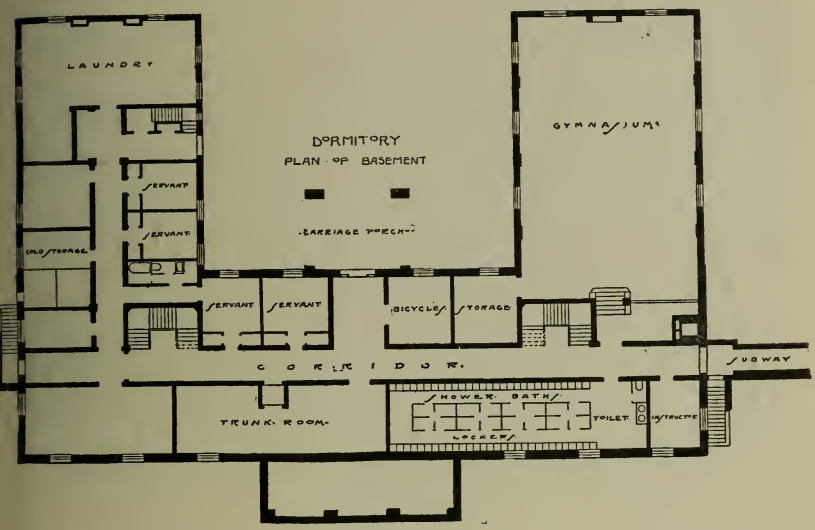
TACONIC HALL

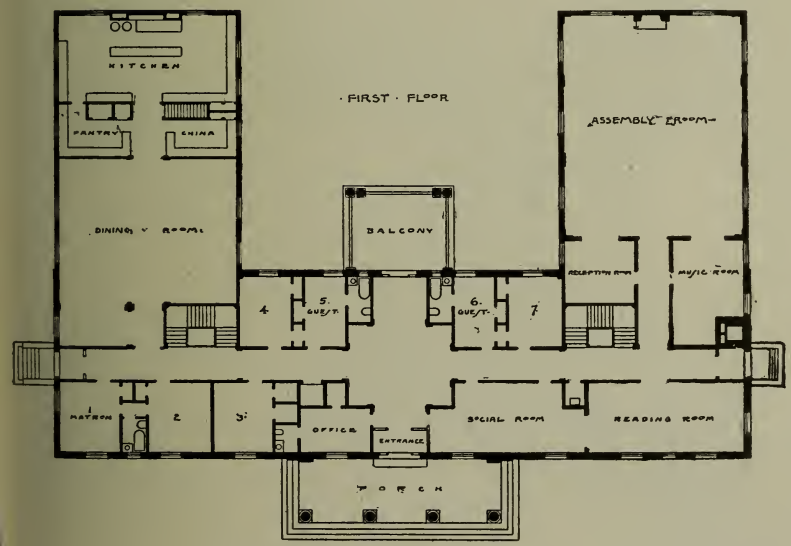
The material of the dormitory is yellow brick and white marble, thus carrying out the color scheme. The building is 156 feet long and 100 feet wide, the courtyard being about 58x70 feet. On account of the slope of the land the basement floor is at grade with the courtyard, thus securing dry and light living rooms and making the wings as seen from the courtyard three stories high. The balcony over the east porch is available for persons living on the third floor, and

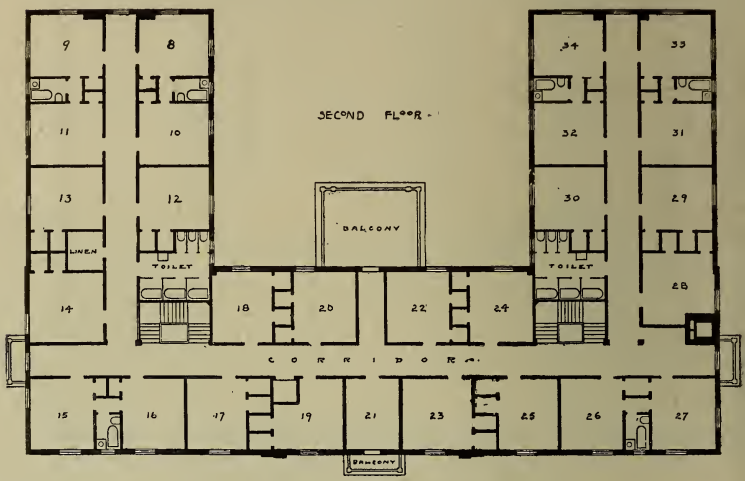
TACONIC HALL

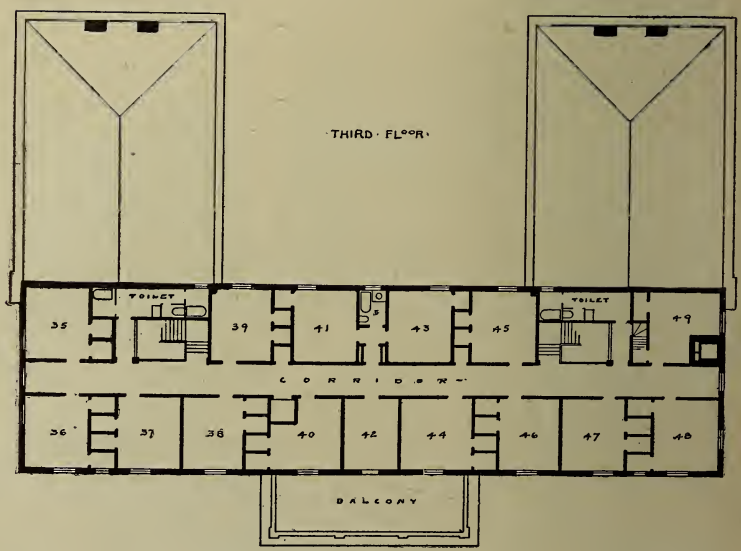
SOCIAL ROOM

READING ROOM


LAUNDRY
DORMITORY
PLAN OF BASEMENT
GYMNASIUM
SERVANT
SERVANT
CARRIAGE PORCH
OLD STORAGE
SERVANT
SERVANT
BICYCLES
STORAGE
SUBWAY
CORRIDOR
SHOWER BATH
LOCKERS
TOILET
INSTRUCTR
TRUNK ROOM


FIRST FLOOR
KITCHEN
PANTRY
CHINA
ASSEMBLY ROOM
DINING ROOM
BALCONY
RECEPTION RM
MUSIC ROOM
4
5. GUEST
6. GUEST
7
MATRON
2
3
OFFICE
ENTRANCE
SOCIAL ROOM
READING ROOM
PORCH


SECOND FLOOR
BALCONY
TOILET
LINEN
TOILET
CORRIDOR
BALCONY


THIRD FLOOR
TOILET
TOILET
CORRIDOR
BALCONY

MUSIC READING RECEPTION

ASSEMBLY HALL

the two west balconies accommodate those living on the first and second floors. Two guest rooms (5, 6) are provided for parents and friends. Two hospital rooms (41, 43), with suitable furniture and intervening bath room, are on the third floor. The building is heated by steam and lighted by electricity. A subway connects the dormitory and the school building, affording easy access to the gymnasium and protection during inclement weather.

Unusual facilities are provided for cultivating a homelike and beautiful social life. The rooms of the first floor afford opportunities for all forms of mental enjoyment, and the gymnasium in the basement is convenient for daily evening physical play, just before retiring.

Two students occupy one room. Each room is supplied with chairs, study-table, book-case, bureau, commode, screen, two couches (three feet wide), mattresses, pillows, coverlets, and rugs. Each boarder will bring bedding, towels, napkins, napkin ring, and two clothes bags.

All articles sent to the laundry must be distinctly and indelibly marked with the owner's name. *Initials will not answer.* Trunks also must be marked so as to be easily identified.

The dormitory will not accommodate all desiring to live in it. Rooms are assigned to entering students according to priority of application, preference being given to residents of Massachusetts.

EXPENSES

Tuition is free to all residents of Massachusetts. "Each pupil from another state than Massachusetts attending a normal school supported by this state shall pay to the principal of the school attended, at the beginning of each half-year session, the sum of twenty-five dollars for the use of the school."

Text-books and supplies are free, as in the public schools.

State Aid, not exceeding one dollar and one-half per

week, may be granted to deserving persons after they have been in attendance for at least one term, provided they are residents of Massachusetts, and do not live in towns where the normal schools are situated.

Board — The regulations of the Board of Education require that the boarders shall pay the current expenses, which include table board, heating, lighting, laundry, and service. The price of board in each of the boarding halls connected with the normal schools of the state is $4 per week or $160 for the school year, payable in advance, in four payments, one every ten weeks, beginning with the opening of school in September.

The object of this payment in advance is to secure the purchase of supplies at wholesale cash prices, thereby lessening the cost of supplies and saving to each boarder much more than the interest of the money advanced.

Under these rates boarders are allowed to remain at the hall during the Thanksgiving recess without extra charge. Students whose homes are at a distance may, on permission of the principal, remain at the hall during other vacations, except the long one in the summer, on payment of the additional sum of $4 per week during such vacation. The hall is closed during the summer.

When pupils leave the school before the expiration of a term, money paid in advance will be refunded pro rata. No deduction is made for absence from the hall of less than one week.

If there are vacant rooms, those who wish to room alone may do so, on payment of the additional charge of fifty cents per week.

Employment — Capable and reliable students can reduce their expenses by assisting in the household work, for example, by waiting on table, washing silver and glass, taking care of corridors and public rooms, etc. Efficiency, need, and priority of application control the appointments. The amounts thus earned vary from $0.80 to $1.50 per week.

STUDENTS

Graduate Course

Helena Rebecca Walley	North Adams

Senior Class

Mary Grace Baker	Lenox
Hattie Louise Beers	Adams
Katherine Theresa Behan	Pittsfield
Gretchen Benjamin	Greenfield
Emma Bittner	Adams
Nellie Bernetta Broderick	Lenox
Adaline Bryant	Clarksburg
Ellen Agnes Burns	Pittsfield
Jeanie Liddell Burns	North Adams
Ethel May Burrington	Heath
Grace Gertrude Carney	Adams
Margaret Agnes Cassidy	Sheffield
Minnie Chapel	Washington (Becket)*
Mary Margaret Clark	Lenox
Clara Elizabeth Conant	Greenfield
Elizabeth Helen Coughlin	Cheshire
Alice Louise Deane	Stockbridge
Mary Dugdale Emmott	North Adams
Annie Marion Fuller	Adams
Bertha Helena Gleason	Clarksburg
Katherine Agnes Gleason	Pittsfield
Ethel Viola Goodrich	Hancock (Wyomanock, N. Y.)
Christina Mary Green	North Adams
Annie Harwood	Fall River
Ethel Rachel Horne	West Newfield, Me. (E. Wakefield Depot, N. H.)
Lena Minnie Hubbard	Wilmington, Vt.
Mary Leonard	North Adams
Grace Catherine McSweeny	Pittsfield
Mabel Eda Medbury	Wilmington, Vt.

* Post-offices are in parentheses.

Clara Elizabeth Nicolai	Great Barrington (Housatonic)
Caroline Grace Preo	North Adams
Edith Clara Sargent	North Scituate
Mary Arvilla Sampson	Hatfield
Teresa Claire Sullivan	North Adams
Mabel Sprague Ware	Shelburne Falls
Winifred Isabelle Wright	Pownal, Vt.

Senior Kindergarten Class

Carrie Mabel Bridges	Williamstown
Lena May Campbell	North Adams
Daisy Dean Ritchie	Bennington, Vt.
Grace Marion Thompson	Adams

Junior Class

Jennie Frances Albert	Pittsfield
Catherine Murphy Barrett	Adams
Mary Margaret Barrett	Adams
Cecile Edith Bennett	Pittsfield
Sara Anne Caley	Lenox
Florence Rozilla Chittenden	Hancock
Evelyn Burrington Coombs	Colrain (Bardwell's Ferry)
Elizabeth Evangeline Cummings	Lanesborough
Estelle Madeline Curley	Holyoke
Mary Alice Davis	North Adams
Mary Evelyn Dowding	Conway
Helena Elizabeth Dunbar	Stockbridge
Carrie Gertrude Eddy	Randolph
Eloise Arnold Gaston	North Adams
Emma Julia Hart	Pittsfield
Myra Lizabeth Hillman	Colrain (Adamsville)
Margaret Elizabeth Leahey	Lee
Margaret Loretta Lynch	North Adams
Margaret Mary Alacoque McCormac	North Adams
Mary Magdalene McDonnell	Lenox (New)
Margaret Evangeline Mullins	West Stockbridge
Anna Josephine Nolan	North Adams
Rose Geraldine O'Neill	Holyoke
Laura Angenette Parker	Greenfield
Mary Agnes Parsons	Pittsfield
Florence Mary Pratt	Chelsea
Anna May Riley	Mittineague
Loretto Mary Riordan	Indian Orchard
Edna May Searing	Stockbridge
Teresa Katharine Shea	Chicopee Falls
Bessie Luella Stanford	Shelburne Falls
Jeanette Rianhard Woodward	New Brighton, N. Y.
Elizabeth Nelson Venard	North Adams

Junior Kindergarten Class

Loretta Agnes Boland	North Adams
Elva Lillian Brownson	Arlington, Vt.
Gertrude Glynn Congdon	North Adams
Gertrude Rose March	Montague (Turner's Falls)
Ethel Vera Knight	Worcester

Special Students

Elizabeth Hall (Baltimore College)	Williamstown
Eugenia Locke (Wellesley College)	North Adams
Katherine Massey Clark	West Upton
Anna L. Durfee	Pittstown, N. Y. (Johnsonville)
Abigail Dorothy Garfield	Tyringham
Cora May Hallam	Shelburne Falls
Margaret Teresa O'Hagerty	Adams
Jennie Mary O'Neill	Waterbury, Ct.
Emma Estella Provan	Manchester Centre, Vt.

Vacation Students

Catherine Elizabeth Andrus	Montague City
Annie Lucy Barrett	Adams
Maude Bassett	Greenfield
Florence Martha Bolton	Rowe
Laura Edith Braley	Putney, Vt.
Annie Elizabeth Burns (1903)	North Adams
Sarah Elizabeth Downes	New Marlborough (Great Barrington)
Ethel Eunice Edwards	East Holliston
Harriet Baker Feeley	Lenox
Bertha Lovina Fowler	Halifax, Vt.
Myrtie Blanche Fuller	Deerfield
Mary Cynthia Grant	South Royalston
Harriet Francina Holden	North Leverett
Ethel Mary Howes	Ashfield
Hope Kelsey	Alford (R. F. D. No. 1, Great Barrington)
Edith Louise Leland	Ashfield
Margaret Annie Longwell	Leyden
Electa Celia Stetson	Ashfield
Katherine Webb Tewksbury	South Framingham
Maybelle Abbie Tice	Norwich
Grace Titcomb	Williamstown
Mary Adeline White	Rowe
Emma Davis Wilson	Rowe

SUMMARY

Graduate course		1
Kindergarten course		9
Senior class	4	
Junior class	5	
Regular course		77
Senior class	36	
Junior class	32	
Special course	9	
Vacation students		23
Normal graduates	1	
Other teachers	22	
Total		110

Certificate Required for Admission to a Preliminary Examination.

_____ 1904.

_____ has been a pupil in the

_____ School for three years, and is, in my judgment, prepared to pass the normal school preliminary examination in the following group, or groups, of subjects and the divisions thereof: —

Group II. _____ Group IV. _____

Group III. _____ Group V. _____

Signature of principal or teacher, _____

Address, _____

Certificate of Graduation and Good Character.

This is to certify that M _____

is a regular graduate of a four years' course of the _____

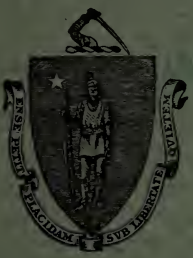
_____ High School, and that, to the best of my knowledge and belief, ____ he is a person of good moral character.

_____ *Principal.*

_____ 1904.

mH
4-05-

NORTH ADAMS NORMAL SCHOOL



CIRCULAR AND CATALOG

= 1905 =

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Straight mine eye hath caught new pleasures
Whilst the landscape round it measures:
Russet lawns and fallows grey,
Where the nibbling flocks do stray;
Mountains on whose barren breast
The labouring clouds do often rest;
Meadows trim with daisies pied,
Shallow brooks and rivers wide;
Flowers and battlements it sees
Bosomed high in tufted trees,—
Where perhaps some beauty lies,
The cynosure of neighbouring eyes.

MILTON.

The thunder and lightning, storm and cloud, as well as the soft beauty of colour, and the harmony of mountain outline, have been a part, and a very important part, of their training. * * On these heights such men seemed to have gained something of the strength of Him who dwells in the heavens far above their highest peaks,—"the strength of the hills," which, as the Hebrew poet says, "is His also."

HUTCHINSON, in The Story of the Hills.

STATE NORMAL SCHOOL

AT

NORTH ADAMS, MASS.

Established June, 1894

CIRCULAR AND CATALOG

For Year ending June 30, 1905

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18 POST OFFICE SQUARE
1905

Approved by

The State Board of Publication

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Established 1837

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His Honor Curtis Guild, Jr., Lieutenant-Governor

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Jeanie L. Burns
Edith C. Sargent

Mrs. Eliza Graeme Graves, *Principal of the Kindergarten*

Grace M. Thompson, *Assistant* Annie Boyd, *Pianist*

CALENDAR

1905

Graduation

Tuesday, June 27.

First Entrance Examination

Thursday and Friday, June 29 and 30, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 12 and 13, at 9 A.M.

School Year Begins

Training School, Monday, September 11.

Normal School, Thursday, September 14, at 9 A.M.

Thanksgiving Recess

Begins Tuesday night, November 21. Ends Monday night, November 27.

Christmas Recess

Begins Wednesday night, December 20. Ends Monday night, January 1.

1906

Second Term Begins

Monday, February 5.

Spring Recess

Begins Friday night, April 6. Ends Monday night, April 16.

Graduation

Tuesday, June 26.

First Entrance Examination

Thursday and Friday, June 28 and 29, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 11 and 12, at 9 A.M.

School Year Begins

Training School, Monday, September 10.

Normal School, Thursday, September 13, at 9 AM..

Thanksgiving Recess

Begins Tuesday night, November 27. Ends Monday night, December 3.

Christmas Recess

Begins Thursday night, December 19. Ends Monday night, December 31.

Sessions are from 9 A.M. to 12 M., and 1.30 P.M. to 4 P.M. Saturday sessions a
omitted.

Entrance examinations on the dates given above begin at 9 o'clock A.M., in th
assembly hall. Candidates are to be present at the opening and on both days. The
should come prepared to stay in September, as the term begins on the following da

For information about the school address the principal at North Adams.

State Normal School

AT NORTH ADAMS, MASS.

LOCATION

North Adams is distinctly picturesque. The elevations that surround the city are among the most attractive of the Berkshire Hills. On the north side are rounded domes of the Green Mountains, on the east the abrupt wall of Hoosac Mountain overhangs the city, while on the south-west border rise the outlines of massive Greylock, the highest peak in Massachusetts.

On the westerly slope of an eminence rising several hundred feet above the river are situated the school buildings. Of the many beautiful locations in Berkshire County, the one chosen is remarkably fine. The near rounded domes, the deep retreating valleys, the winding streams, with all their changing life and aspects, always please and inspire. The noisy hum of the city slightly removed, the beauties of nature close at hand, the duties of student life are made easy and profitable to an unusual degree. The city of North Adams was both wise and generous in its gift of a location. Especially noteworthy are the facilities for out-door study of nature and of industry.

The city is easily reached from the east and west by the Fitchburg Railroad, from the south by the Boston & Albany road. Electric cars connect the city with Williamstown, Adams, and other towns to the south.

BUILDINGS

The school building, the dormitory, and the principal's house in exterior are of yellow brick and white marble, with metal roofs. The school building, in Italian style, is one hundred and fifty-two feet long, eighty-four feet deep, and

three stories and basement in height. It is of slow-burning construction, the floor timbering and roof being carried with steel beams and trusses. The arrangement of stairways, which are iron, gives easy and safe egress.

In the basement are the boiler, engine, fuel, heating, and repair rooms, a lunch room, a room for manual training, and a photographic dark room; in the first story, two reception rooms, cloak, coat, and toilet rooms, and four natural science laboratories; in the second story, the assembly hall, office, libraries, and class rooms for the languages and mathematics; in the third story, the physical and chemical laboratories, the art rooms, and a general class room; and in the attic is ample space for storage.

The interior is finished in oak throughout and provided with modern improvements and facilities. Cabinets, drawers, closets, specially adapted to the needs of the school, are provided in all the rooms. In strength, simplicity, beauty, and adaptation to its use the school building is not surpassed.

REQUIREMENTS FOR ADMISSION

Candidates for admission to any one of the normal schools must, if young women, have attained the age of sixteen years, and if young men, the age of seventeen years. Their fitness for admission will be determined: —

1 By their standing in a physical examination.
2 By their moral character.
3 By their high school record.
4 By a written examination.
5 By an oral examination.

Physical Examination

The State Board of Education adopted the following vote March 7, 1901: —

That the visitors of the several normal schools be authorized and directed to provide for a physical examination of candidates for admission to the normal schools, in order to determine

whether they are free from any disease or infirmity which would unfit them for the office of teacher, and also to examine any student at any time in the course, to determine whether his physical condition is such as to warrant his continuance in the school.

Moral Character

Candidates must present certificates of good moral character. In deciding whether they shall prepare themselves to become teachers, candidates should note that the vocation requires more than mere freedom from disqualifying defects; it demands virtues of a positive sort that shall make their impress for good upon those who are taught.

High School Record

It may be said, in general, that if the ordinary work of a good statutory high school is well done, candidates should have no difficulty in meeting the academic tests to which they may be subjected. *They cannot be too earnestly urged, however, to avail themselves of the best high school facilities attainable in a four years' course, even though they should pursue studies to an extent not insisted on, or take studies not prescribed, in the admission requirements.*

The importance of a good record in the high school cannot be overestimated. *Principals are requested to furnish the normal schools with records of the high school standing of candidates.* The stronger the evidence of character, scholarship, and promise, of whatever kind, candidates bring, especially from schools of high reputation and from teachers of good judgment and fearless expression, the greater confidence they may have in guarding themselves against the contingencies of an examination and of satisfying the examiners as to their fitness.

Written Examination

The examinations will embrace papers on the following groups of subjects, a single paper with a maximum time allowance of two hours to cover each of groups I, II, and

IV, and a single paper with a maximum time allowance of one hour to cover each of groups III and V (*five papers with a maximum time allowance of eight hours*): —

I *Language* — (*a*) English, with its grammar and literature, and (*b*) either Latin or French.

II *Mathematics* — (*a*) The elements of algebra and (*b*) the elements of plane geometry.

III *United States History* — The history and civil government of Massachusetts and the United States, with related geography and so much of English history as is directly contributory to a knowledge of United States history.

IV *Science* — (*a*) Physiology and hygiene and (*b* and *c*) any two of the following: physics, chemistry, physical geography, and botany, provided one of the two selected is either physics or chemistry.

V *Drawing and Music* — (*a*) Elementary, mechanical and free-hand drawing, with any one of the topics, — form, color, and arrangement, and (*b*) music.

Oral Examination

Each candidate will be required to read aloud in the presence of the examiners. He will also be questioned orally either upon some of the foregoing subjects or upon other matters within his experience, in order that the examiners may gain some impression about his personal characteristics and his use of language, as well as give him an opportunity to furnish any evidences of qualification that might not otherwise become known to them.

General Requirement in English for All Examinations

No candidates will be accepted whose written English is notably deficient in clear and accurate expression, spelling, punctuation, idiom, or division of paragraphs, or whose spoken English exhibits faults so serious as to make it inexpedient for the normal school to attempt their correction.

THE WESTERN HILLS

JUST OVER THE WESTERN HILLS

The candidate's English, therefore, in all oral and written examinations will be subject to the requirements implied in the statement here made, and marked accordingly.

Special Directions for the Written Examinations

I Language

(*a*) *English* — The subjects for the examination in English will be the same as those agreed upon by the colleges and high technical schools of New England and now quite generally adopted throughout the United States.

1 *Reading and Practice* — A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter and spirit of the books, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of a few topics to be chosen by the candidate from a considerable number set before him in the examination paper. In place of a part or the whole of this test, the candidate may present an exercise book, *properly certified by his instructor,* containing compositions or other written work done in connection with the reading of the books.

The books set for this part of the examination are: —

1903–1905 — Shakespeare's *The Merchant of Venice* and *Julius Cæsar; The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner;* Carlyle's *Essay on Burns.*

1906–1908 — Shakespeare's *Macbeth* and *The Merchant of Venice; The Sir Roger de Coverley Papers* in *The Spectator;* Irving's *Life of Goldsmith;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe* and *The Lady of the Lake;* Tennyson's *Gareth and Lynette, Lancelot and Elaine,* and *The Passing of Arthur;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

2 *Study and Practice* — This part of the examination presupposes a more careful study of each of the works named below. The examination will be upon subject-matter, form, and structure.

In addition, the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong. The books set for this part of the examination will be: —

1903–1905 — Shakespeare's *Macbeth;* Milton's *Lycidas, Comus, L'Allegro,* and *Il Penseroso;* Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

1906–1908 — Shakespeare's *Julius Cæsar;* Milton's *L'Allegro, Il Penseroso, Comus,* and *Lycidas;* Burke's *Speech on Conciliation with America;* Macaulay's *Essay on Addison* and *Life of Johnson.*

(*b*) *Either Latin or French* — The translation at sight of simple prose or verse, with questions on the usual forms and ordinary constructions, and the writing of simple prose based in part or in full on the passage selected.

The Conference on Uniform Requirements in English for Admission to College, on whose recommendations the foregoing lists of books in English and directions for study are based, advises —

1 That English be studied throughout the primary and secondary school courses, and, when possible, for at least three periods a week during the four years of the high school course.

2 That the prescribed books be regarded as a basis for such wider courses of English study as the schools may arrange for themselves.

3 That, where careful instruction in idiomatic English translation is not given, supplementary work to secure an equivalent training in diction and in sentence structure be offered throughout the high school course.

4 That a certain amount of outside reading, chiefly of poetry, fiction, biography, and history, be encouraged throughout the entire school course.

5 That definite instruction be given in the choice of words, in the structure of sentences and of paragraphs, and in the simple forms of narration, description, exposition, and argument. Such instruction should begin early in the high school course.

6 That systematic training in speaking and writing English be given throughout the entire school course. That, in the

high school, subjects for compositions be taken partly from the prescribed books and partly from the students' own thought and experience.

7 That each of the books prescribed for study be taught with reference to (*a*) the language, including the meaning of the words and sentences, the important qualities of style, and the important allusions; (*b*) the plan of work, *i.e.,* its structure and method; and (*c*) the place of the work in literary history, the circumstances of its production, and the life of its author. That all details be studied, not as ends in themselves, but as means to a comprehension of the whole.

II Mathematics

(*a*) The elements of algebra through affected quadratic equations.

(*b*) The elements of plane geometry.

While there is no formal examination in arithmetic, the importance of a practical working acquaintance with its principles and processes cannot be too strongly emphasized. The candidate's proficiency in this subject will be incidentally tested in its applications to other subjects.

In geometry, the candidate's preparatory study should include independent solutions and demonstrations, — work that shall throw him upon his own resources; and his ability to do such work will be tested in the examination. An acquaintance with typical solid forms is also important, — enough, at least, to enable the candidate to name and define them and to recognize the relations borne to them by the lines, planes, angles, and figures of plane geometry.

III United States History

Any school text-book on United States history will enable candidates to meet this requirement, provided they study enough of geography to illumine the history, and make themselves familiar with the grander features of government in Massachusetts and the United States. Collateral reading in United States history is strongly advised; also in English history, so far as this history bears conspicuously on that of the United States.

IV Science

(*a*) *Physiology and Hygiene* — The chief elementary facts of anatomy, the general functions of the various organs, the more obvious rules of health, and the more striking effects of alcoholic drinks, narcotics, and stimulants upon those addicted to their use.

(*b* and *c*) *Any Two of the Following Sciences, — Physics, Chemistry, Botany, Physical Geography, provided One of the Two is either Physics or Chemistry* — The chief elementary facts of the subject selected, so far as they may be presented in the courses usually devoted to them in good high schools. It will be a distinct advantage to the candidate if his preparation includes a certain amount of individual laboratory work.

A laboratory notebook, with the teacher's endorsement that it is a true record of the candidate's work, will be accepted as partial evidence of attainments in the science with which it deals. The original record should be so well kept as to make copying unnecessary.

V Drawing and Music

(*a*) *Drawing* — Mechanical and free-hand drawing, — enough to enable the candidate to draw a simple object, like a box or a pyramid or a cylinder, with plan and elevation to scale, and to make a free-hand sketch of the same in perspective. Also any one of the three topics, — form, color, and arrangement.

(*b*) *Music* — Such elementary facts as an instructor should know in teaching singing in the schools, including major and minor keys, simple two, three, four, and six part measures, the fractional divisions of the pulse or beat, the chromatic scale, the right use of the foregoing elements in practice, and the translation into musical notation of simple melodies or of time phrases sung or played.

Importance of Adequate Preparation

Candidates should measure their duty of making adequate preparation not wholly by the subjects selected and the papers set for the admission examinations, but by the larger demands their chosen vocation is sure to make upon them.

The more generous and thorough, therefore, the preparation of the candidate, the greater the likelihood of profiting by the normal school, of completing the elementary course on time, of securing employment after graduation, and of doing creditable work as a teacher.

The candidate is advised, therefore, to utilize all feasible opportunities offered by the regular high school course for promoting this breadth of preparation, and the high school should aim to hold the candidate up to the higher ideals of such preparation.

Equivalents

Reasonable allowance in equivalents will be made in case a candidate, for satisfactory reasons, has not taken a study named for examination. Successful experience in teaching will be taken into account in the determination of equivalents.

Division of the Examinations

Candidates may be admitted to preliminary examinations a year in advance of their final examinations, provided they offer themselves in one or more of the following groups, each group to be presented in full: —

II Mathematics
III United States History
IV Science
V Drawing and Music

Preliminary examinations can be taken in June only.

Every candidate for a preliminary examination must present a certificate of preparation in the group or groups chosen, or in the subjects thereof, the form of certificate to be substantially as follows: —

.....has been a pupil in the .....School for.....years, and is, in my judgment, prepared to pass the normal school preliminary examination in

the following group or groups of subjects and the divisions thereof: —

.....

.....

Signature of principal or teacher,.....

Address,.....

The group known as I Language must be reserved for the final examinations. It will doubtless be found generally advisable in practice that the group known as IV Science should also be so reserved.

While division of the final or complete examinations between June and September is permissible, it is important both for the normal school and for the candidate that the work laid out for the September examinations, which so closely precede the opening of the normal schools, shall be kept down to a minimum. Candidates for the final or complete examinations are earnestly advised, therefore, to present themselves in June.

TIMES OF EXAMINATION AND ADMISSION

Examinations for admission to the normal school are held at the close of the school year in June, and also at the beginning of the school year in September, as stated in the calendar. Candidates are advised to present themselves at the first examination.

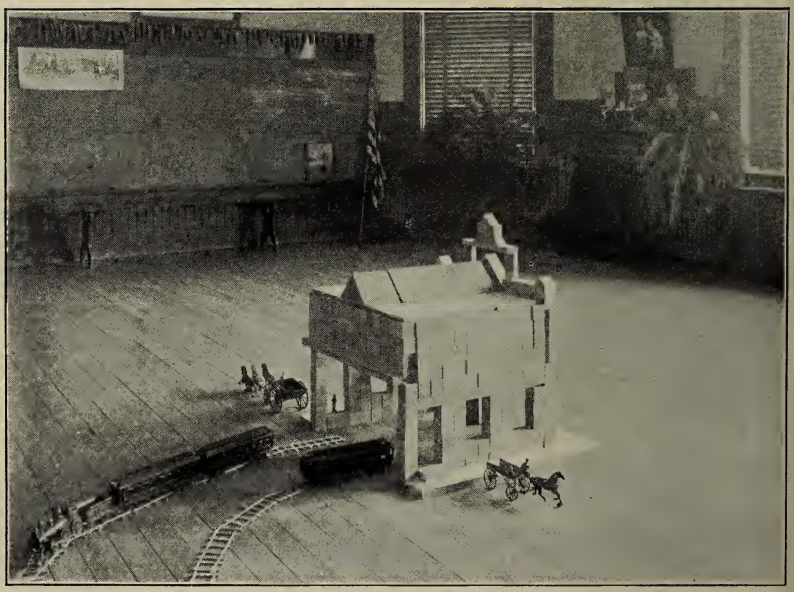
New classes are admitted to the normal schools at the beginning of the fall term. Candidates should come in September prepared to stay, as regular work begins on the day following the examinations. In exceptional cases admissions to classes already formed are allowed at the beginning of the second term.

COURSES

Elementary Course

The elementary course of study is designed primarily for those who aim to teach in the public schools below the high

KINDERGARTEN — GROUP WORK



school grade. It comprises substantially the following subjects: —

I The study of the educational values of the following subjects and of the principles and methods of teaching them: —

(*a*) English, — reading, oral and written composition, grammar, rhetoric, English and American literature.

(*b*) Mathematics, — arithmetic and bookkeeping, algebra, plane geometry.

(*c*) History, — history and civil polity of the United States and of Massachusetts.

(*d*) Science, — physics, chemistry, mineralogy, botany, zoölogy, geography, physiology and hygiene.

(*e*) Drawing, vocal music, physical training, manual training.

II (*a*) The study of man, body and mind, for the principles of education; the study of the application of these principles in school organization, school government, and in the art of teaching; the history of education; the school laws of Massachusetts.

(*b*) Observation and practice.

The time required for the completion of this course depends upon the students. It may not exceed two years for those of satisfactory preparation and superior ability; for others, three years are needed to do the work properly. In many cases more than two years are insisted upon. A diploma is given when the course is satisfactorily completed.

A Third Year for Practice and Study

The board of visitors and the principal of any normal school may arrange for its students a third year of study and of practice in teaching whenever, in their judgment, such action is desirable. The object is a more complete mastery of the topics arranged for the regular two years' course, as well as further experience in teaching.

For students signifying at their admission their intention

of pursuing a three years' course, it will be arranged so that elective subjects may be begun early in the course, instead of being postponed to the third year.

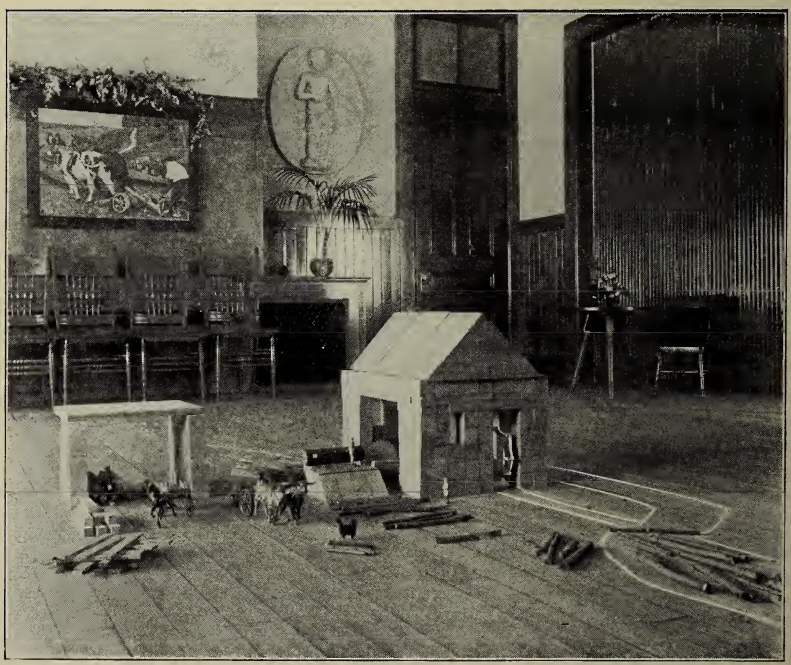
The Kindergarten Primary Course

The principles which control kindergarten instruction apply not alone to children of three or four years but as well to the whole phase of early childhood, the period extending from two or three to seven or eight years of age. Kindergarten and primary instruction differentiate not in principle, not in general method, but in adaptation of ways and means to the tendencies and growing powers prominent at that period. The process is continuous, the objects studied vary, constructive power widens in application, the use of symbols becomes increasingly prominent. The course as planned and practised trains teachers to work in the kindergarten with due regard to succeeding years of growth of children, and in the primary grade with due regard to previous training and later growth. For such teachers the demand far exceeds the supply.

The kindergarten primary course is a modification of the elementary course (see page 16) and requires two years at least for completion. The greater portion of the practice teaching may be done in the primary or kindergarten grades as the student may choose.

To enable students to become competent principals of kindergartens a third year of advanced kindergarten study and responsible control has been arranged. Different children attend the afternoon kindergarten and their instruction is given into the charge of graduate students of ability, under the general supervision of the principal of the department. Similar facilities are afforded for study and practice in the first grade primaries. Graduate students of marked ability are paid a small salary, sufficient to pay living expenses, during the third year. A special diploma is given to students completing satisfactorily the graduate course.

KINDERGARTEN — LUMBERING



THE SAW MILL

The conditions of admission are the same as for the elementary course. In addition, there should be some facility in playing the piano and singing, if the better positions are to be secured. Students pay the cost of material taken away, but this expense does not exceed ten dollars for the course.

For further details see page 43.

Special Courses for Teachers

Teachers of several years of successful experience in teaching, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal and of the board of visitors, select a course (including the course in psychology and pedagogy), and when such course is successfully completed they shall receive certificates for the same. Candidates are admitted to this course without written examination.

Teachers desirous of spending their vacations at the school are cordially invited to come at any time. Observation work, study of elected subjects, or participation in regular course work and preparation of teaching material, are offered in all departments of the normal and training school. There will be afforded every facility for study, the work being adapted to the wishes and capabilities of applicants, in so far as the permanent needs of the school permit.

For subjects see page 24.

Special Course for College Graduates

Graduates of colleges and universities, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal of the school and of the board of visitors, select from the above curriculum of study a course which may be completed in one year, and when such course is successfully completed they shall receive a certificate for the same. Candidates are admitted to this course without written examination.

EQUIPMENT

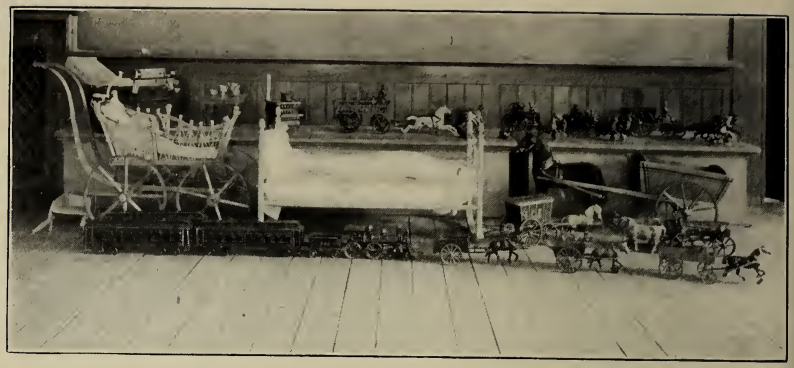
The four natural science laboratories are arranged in sequence, and by means of specimens and models in well-lighted wall cases is displayed the progression of mineral, plant, and animal life to its final development in man. Banks of drawers are provided in the laboratories for collections of the varieties of each type displayed in the wall cases. At the table are drawers for the working collections and tools distributed to students. In the instructors' laboratories are reserve specimens, models, pictures, charts, and diagrams.

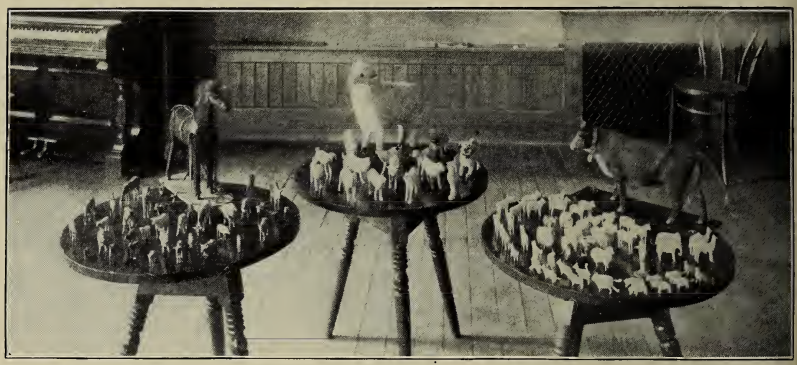
Worthy of special mention are the following materials for study: —

The synoptic and Howell's college collection of minerals and rocks in the mineralogical and geological laboratory.

In the biological laboratories are the Deyrolle plant models, illustrating twelve of the leading families; the synoptical collection of invertebrates and vertebrates; the preparations (wet and dry) showing the habits, homes, and metamorphoses of many insects, the development of a snail, a leech, a crayfish, a horseshoe crab, a spider, a fish, a salamander, a frog, a toad, a snake, and a lizard, displaying all stages of growth, from the egg to the adult form; dissected specimens of a clam, a crayfish, a lobster, a fish, a frog, a lizard, a turtle, a dove, and a rat, displaying separately the digestive, circulatory, and nervous systems; aquaria and cages; a series of skeletons, a human skeleton, a life-size manikin, a set of Auzoux models (eye, ear, larynx, brain, pelvis), and preserved vital organs.

In the geographical laboratories are several thousand carefully selected, mounted, and classified pictures, including photographs, engravings, half-tones, bromide enlargements, the Hölzer series of oleographs, and several hundred lantern slides. The models include the Jones eighteen-inch relief globe, Howell's (sixteen feet radius) model of the United States, and a large model of southern New England, the Harvard series of physiographic models. Slated spheres, large and small globes are





provided for class and individual use. Three sand-tables, each ten feet by four feet, afford abundant opportunities for sand modelling.

The collection of maps includes two maps of Switzerland, one beautifully shaded to show reliefs and drainage, and the other to show the same physical features combined with political and industrial features; two similar maps of Alpenland; Habenicht-Sydow physical series; Johnston political series; a series of thirty world maps, showing physical, productive, and political features; coast survey charts; topographic maps and folios; a series of maps of Massachusetts, showing relief, drainage, cities, railways, counties, etc.; similar maps of Rhode Island and New Hampshire; a series of maps for study of map symbols; pamphlets, railway folders, magazines, etc., for commercial geography.

The mathematical department is supplied with collections of models for individual use and class observation in the study of geometry, arithmetic, and algebra in their appropriate development through all grades, including those of the high school.

The historical and literary departments are supplied with several hundred classified pictures and numerous charts.

The art departments are equipped with adjustable tables, models, type, and ornamental forms, pictures, drawings, and casts, illustrative of the phases of modern art teaching.

The library has been selected with especial reference to the needs of teachers. Department libraries are proportionately represented, and furnish excellent opportunities for general reference work and special investigation. Magazines and pamphlets for general culture and departmental study are numerous, the pamphlet division already including several thousand copies.

The three laboratories for physics and chemistry are equipped with modern improvements, and with apparatus for individual experimentation in both qualitative and quantitative work.

The manual training room is furnished with twenty-five sloyd benches and tools for working in clay and wood.

The gymnasium is located in the dormitory and is equipped with the apparatus for the practice of Swedish gymnastics and a system of shower baths. See page 46.

An electric projection lantern and numerous slides have been

provided. The lantern can be used in six different rooms, and supplements the work in the various sciences, in literature, and in art.

DESIGN OF THE NORMAL SCHOOL

"The design of the normal school is strictly professional; that is, to prepare in the best possible manner the pupils for the work of organizing, governing, and teaching the public schools of the Commonwealth" (Board of Education, May 6, 1880).

The work of each department is to secure these ends: —

Pupils — The leading motive and continuous effort are to change the pupil's point of view from that of the student to that of the teacher, to inspire him with the spirit of the true teacher, to train him to the noblest ideals and best habits of personality, thinking, and teaching.

Children — The pupil is placed from the beginning of his course in close contact with children, that through them there may be revealed to him such understanding of child-life in general and appreciation of the individual children as will impress upon his mind the necessity of their interests being his chief concern. That schools should be organized to satisfy the needs of children, that school management is the process of securing self-control by the children, that children should be taught, rather than subjects, are truths which are presented as of fundamental importance.

Subjects — The thought of the pupil is carefully directed to the subjects of a public school course. Each subject is analyzed to find its content, its natural or logical order, its teaching order. The appropriate sources of knowledge are found, the prominent processes of acquisition are emphasized, and corresponding forms of expression exemplified. The knowledge, disciplinary and cultural values of each subject are discussed. Stress is laid upon accuracy of knowledge and the use of each subject as a *means* and not an end in education. Natural and helpful correlations of subjects are made, and the place of each in a course of study indicated.

Teaching — The process of learning is distinguished from the process of teaching, the pupil being led to perceive most definitely that in learning the student concentrates his thought upon the object, that in teaching the teacher concentrates his thought upon the student's mental process of learning. Pupils are led to discover by personal observation that the teaching process consists of two parts, namely, preparatory thought (*i.e.,* lesson planning) and consequent instruction (*i.e.,* teaching). Lesson plans are derived by the pupils from observed teaching and the study of typical plans, and are found to include consideration of (1) aims, that is, needs of the children to be satisfied; (2) right mental activity of the child; (3) appropriate sources of knowledge and interest. Lesson teaching is perceived to be (1) skillful use of sources of knowledge and interest, (2) which use stimulates right activity in each child, (3) and enables him to satisfy his needs. Pupils, by practice in writing lesson plans and in teaching children in accordance with the plans, become certain that intimate knowledge of children and thorough lesson planning are, together with the personality of the teacher, the vital conditions for successful teaching; that lesson plans may free the teacher of the burden of the subject, and enable him to attend discreetly and heartily to the needs and interests of the children. Similarly, the place and purpose of recitations, drills, examinations, and criticism are brought before the pupils for consideration and judgment.

Organization — The principles underlying the organization of a school are arrived at by the pupils by direct study of the training school and other schools they have experienced, by consideration of children's needs as individuals and as members of society, and by use of the experience of teachers and other educational authorities.

Government — Pupils are led, by review of their own experiences in conforming, obeying, and controlling, by the testimony of others, by their knowledge of children, by

their efforts in the training school, and by their study of psychology, to understand the relations between knowing, feeling, and doing, to value and use the instinctive reactions, and to attempt to form habits in themselves and children of right self-activity for the sake of self-development and service to others.

The school laws of the State receive due and appropriate study, in connection with the consideration of organization, government, and the history of education.

ORDER OF STUDIES IN THE ELEMENTARY COURSE

JUNIOR CLASS		SENIOR CLASS	
First Term	Second Term	Third Term	Fourth Term
Drawing 3	Drawing 3	Drawing 3	–
Music 4	Reading 3	Grammar 3	Reading 3
Manual training 2	Gymnastics 2	Gymnastics 2	Gymnastics 2
Language 1	–	Literature 3	Literature 3
Chemistry 4	Physics 4	Geography 4	Geography (half term) 5
Mineralogy 2	Botany 2	Zoölogy 2	History of education, school laws (half term) 5
Physiology 3	–	History 4	
Geometry 4	Algebra 4	–	Psychology and pedagogy 5
Penmanship	Arithmetic 4	–	–
Child study: — 4 Individuals Groups	Observation of teaching and control. Assisting 4	School organization 1 Teaching at training school 4	School management 1 Teaching and control (half term) 10
Kindergarten course omits chemistry and part of geometry	Kindergarten course omits algebra	Kindergarten course omits drawing and history	Kindergarten course omits geography

NOTE. — Figures indicate the number of periods per week.

THE RANGE OF THE SUBJECTS

The professional work is indicated in general on pages 22–24, under the topic, "Design of the Normal School," but applies in detail to each of the subjects analyzed and described as follows. Accuracy and fulness of scholarship are strenuously emphasized.

Psychology and Pedagogy

The study of children is continuous throughout the whole course. Individual children are carefully observed to ascertain individual physical, mental, and moral aptitudes and defects, in order that each child's needs may be satisfied. Groups of children — the healthy and the sick, the able and the weak, the bright and the dull, the tidy and the slovenly, the leaders and the followers, the good and the bad, etc. — are found, and their relative numbers and importance estimated, that justice may be done to all. Based on these and similar observations made elsewhere are the students' conclusions as to native reactions, behavior, self-control, and tact.

In their study of individual subjects of the course, students are taught to recognize the elementary processes of acquisition, the emotions aroused, the importance of interest, and the volitions resulting. The sources of knowledge, the stimuli of interest, the mental processes appropriate to the several subjects, and the conditions in general for right mental activity in each subject, are learned as individual facts.

In the observation and practice of teaching, effects of the teacher's knowledge of children, of subject, of fitness of mental process, of the influence of tact, of the possession of right habits are discerned.

During the last term of the course, the systematic study of man as an educable being is based upon the child study, the analysis of subjects, and the observation and practice of teaching previously described. The purpose of this course is to organize into attitude and habit, as thoroughly as possible, the following propositions.

The present characteristics of body and mind in men are evolutionary products.

Every child is the result of countless generations of developmental changes both in body and mind.

Growth includes fundamentally the repetition by body and mind of the essential features of race progress. The phases of life — infancy, early childhood, later childhood, adolescence, adult life, and old age — are racial metamorphic periods, necessarily with distinctive characteristics.

The reflexes, instincts, and forms of consciousness of childhood are noticeably hereditary habits or tendencies, and are relatively stable.

Individuality is partly inherited, partly acquired.

Environment includes the inherited and acquired characteristics of one's own body and mind, as well as the physical surroundings of outer life.

Education is possible and necessary because a child is born with relatively few organized habits.

Education is under the immediate control of others for nearly one-third of life because of the ever-increasing variety and complication of experiences necessary to obtain higher success in living.

Education never ceases, and should be intelligently adapted to the characteristic needs of each phase of life.

Professional preparation for teaching is coming into conscious intelligence, and correct habits of directing the inherited tendencies and habits of the learner, under the influences of improving environment, into the acquirement of ever-increasing power of truth, beauty, and goodness, expressed in human conduct.

Professional preparation is the organization into habits of thought and practice (1) of discriminating knowledge of the evolutionary progress of man, (2) of the present physiological functions, (3) of the present mental functions, (4) of the interdependence of body and mind, (5) of the conditions necessary for right activity of body and mind. The present physiological functions of man are studied under the topics Physiology and Zoölogy and are reviewed in this course. The present mental functions are consciously investigated by the systematic study of children and adults, individuals and groups; by introspection; and by the testimony of others. The conditions of right activity for learning and teaching are apprehended by studying the ways and means in which the needs of children are satisfied; by analysis, organization, and correlation of knowledge into conditions favorable to mental growth; by the application of principles during the practice of teaching.

Principles of psychology and pedagogy are apprehended and appreciated because of their guidance of thought processes,

their productiveness of interest and certainty, their determination of method. The study of psychology and pedagogy is for the illumination and inspiration of teaching.

School Organization and Management

These subjects are studied in a manner very like that described above. Observation and induction are the major portion of the process. The training school serves as the model of a school for children, the normal school as one for youth.

History of Education

The aims of this course are: —

1 To discover the progress of educational theory and practice.

2 To discuss the aims, method, and result of each.

3 To discuss the meaning and value of principles of education as evolved.

4 To find one's need of gaining inspiration from others.

5 To stimulate the desire to know the practice of other individuals and nations.

6 To liberalize, — foster the creative rather than the imitative spirit.

In the conduct of this course each pupil is provided with a brief compendium of the history of education as a foundation for his work; and a departmental pedagogical library is provided for reference use. Each pupil outlines the assigned topic for oral or written recitation, and free criticism follows. Frequent assignments of special subjects for investigation and report are made. Whenever feasible, educational theories and practices are illustrated in the conduct of the regular recitation.

School Laws of Massachusetts

The purpose of this course is to make the students familiar with the principal powers, duties, and relations of teachers, pupils, and other parties directly concerned in school work as defined in the Revised Laws. To this end, brief consideration is given to law, — its relation to custom, as subsequent rather than precedent; its purpose, in defining and unifying practice;

its kinds, — permissive, compulsory, and prohibitory. The more important laws are then analyzed; and the several powers and duties granted and forbidden to each of the parties finally summed up and classified.

Nature Study and Natural Science

In the work in the natural sciences there are sought constantly the knowledge, the interest, the training needed by those who are to teach nature study and related subjects in elementary schools. Hence the aim is to cause the prospective teacher to possess and to be able to cultivate in others "what may be termed the elementary equivalent of the genuine scientific spirit, so that out of his native fondness for things about him shall come an enthusiastic truth-seeking, reverent attitude toward nature," an appreciation of the beauty, harmony, and inviolability of nature's laws; together with some mastery of the means for subduing nature's forces and utilizing them for his own protection and development and for the social good.

Mineralogy — Each student is assigned a place in the laboratory, and is provided with apparatus and typical specimens (see "Equipment," page 20).

He is taught to recognize and name a considerable number of minerals and rocks by practice in distinguishing their physical properties. A smaller number of the most common and useful minerals, with their varieties and the rocks in which they occur, are studied in greater detail. Special stress is laid upon such as can be found in the neighborhood of the school, and upon the uses of mineral bodies for manufacturing, building, and decorative purposes.

Students are led to see the value of such work in developing the power and the habit of close observation, critical comparison, and nice discrimination; also in cultivating interest in common things, and utilizing the collecting instinct of children for their education.

A few chemical tests are taught, and other interesting correlations made with the study of chemistry going on at the same time.

Each student is assigned a topic for special research, the results of which are presented to the class. This gives training

in the use of books and in the orderly arrangement of subject-matter for teaching purposes. Each is required to make a collection of minerals and rocks of the region, and to illustrate the assigned topic; and field excursions to several interesting localities are made for this purpose.

Chemistry — The following are some of the topics considered: nature of chemical change, oxygen, nitrogen, air, hydrogen, water, the forms of carbon, carbon dioxid, coal, illuminating gas, combustion and flame, foods, respiration, fermentation, manufacture of lime, iron and glass, acids, alkalies, salts. The metric system of weights and measures is used.

Each student prepares simple apparatus and performs experiments (see "Equipment," page 21), being guided to the proper interpretation of the observed results by printed questions and directions. Ability to use experiments in teaching is especially sought. Those who work faster or who have had the subject-matter before are given extra exercises, adapted to their ability, to present before the rest of the class.

The laboratory work is followed by class discussions, and notes on each experiment are written, which are expected to be in good form, correct in English, and to cover the following points: —

1 Purpose of the experiment (topic to be illustrated).

2 Apparatus (what we use).

3 Experiment (what we do).

4 Results or observations (what we learn by the senses).

5 Inferences and explanations (what we learn by thinking, reading, etc.).

6 Applications (what things in every-day life, in nature, in other studies, the experiment may be used to teach or illustrate).

In addition to the individual laboratory work, students perform assigned experiments before the class, and question their classmates about the results and their explanations. They also conduct experimental work in the practice school.

Special attention is given to the applications of experiments in explaining the facts of common life, or of other studies, such as mineralogy, human physiology, and nature study. Visits are made to the gas works, a lime kiln, and an iron foundry.

Physics — From the view point of interest and daily experi-

ence, the subject is introduced by observational study of the machinery, tools, and utensils of the various mechanical departments. The following apparatus is studied in considerable detail: boilers (high and low pressure), gauges, thermometers, radiators, flues, valves, packing, weigh-scales, steam engine, fans, steam kettles, steam traps, pumps, water heaters, water supply, plumbing; gymnasium apparatus, elevator; electric wiring, dynamo, projection lantern, transformers, lighting apparatus, batteries, bells, clocks, telephones, gas pipes, meters, burners, etc.

From the view point of the subject, those portions are selected which, it is thought, will be most useful to teachers in elementary schools, such as: pressure in water and air, with applications to city water systems, artesian wells, hydraulic press, specific gravity methods, barometer, pumps, siphon, breathing, etc., nature, properties, and states of matter; simple machines, and the conservation of energy; heat, and its manifold applications, magnetism, and electricity.

The school is well supplied with apparatus; but special pains is taken to teach students to improvise, from such materials as may be gotten anywhere, inexpensive apparatus, which they may take into the schools to illustrate the simpler facts of physics, physical geography, and human physiology.

The work is chiefly qualitative, but, wherever possible, computations based upon measurements made in the experimental work are the means of correlating physics and mathematics and of securing greater power in both.

Drawings or diagrams are required when they can be made to aid in the expression of conditions and results.

Botany — Plants are studied as living, breathing, working beings, with structure adapted to their functions and their surroundings. Hence plant physiology is given a prominent place, and experiments are performed by members of the class to show how plants live and grow. The work is begun in the winter, with twigs and buds of trees in the hands of each pupil. These are put in water, and their development watched. Each student plants seeds of squash, bean, pea, and corn, which are cared for in the laboratory, and the morphology of the seeds and seedlings is made out. Drawings, properly labelled, to illustrate gross

structure, are asked for, which, though they be diagrammatic, will not merely suggest but will express accurate conceptions of the real construction of the object represented.

The cycle of life-changes from seed to seed again is traced, such topics as the following being used: —

The conditions of germination
Storage of food in seeds, etc.
Soils and fertilizers
Roots and root work
Relation of plants to the soil
Stems and their uses
Buds and what they promise
Trees and forestry
Leaf arrangement, with reference to light, air, water
Food of plants, — how taken, how used
Legumes as nitrogen gatherers; soil inoculation
Leaf structure and work
Nature and uses of floral organs
Fertilization, pollination and cross-pollination
Fruits, and their uses to the plant
Seed dispersal (what plants do for their young)
Propagation by bulbs, cutting, grafting, etc.
Relations between plants and animals
Uses of plants to man and other animals
How plants protect themselves
The struggle for existence among plants

One or more topics, with references to text-books and reference books, are assigned to each member of the class, who prepares an outline of the subject-matter, collects material to illustrate the same, teaches or presents a portion of the subject to the rest of the class, and prepares a plan for teaching a similar lesson to children.

As the season allows, out-door excursions are taken, to study plants alive and at home. The work is confined almost wholly to the higher plants, for lack of time and because microscopic work is considered to be neither suitable nor feasible for elementary schools. Prepared slides are shown by the compound microscope, or projected on the screen.

Zoölogy — A series of typical animals is so studied as to make

out their plans of structure and the adaptation of their structure to habits and surroundings. Related forms are compared with these, and some idea of classification is developed. Each student examines both live and preserved specimens, furnished by the school or collected by himself, being guided by definite directions and questions for thought. The facts observed are expressed by labelled drawings and by written statements.

The use that may be made of the material in giving animal lessons in elementary schools is constantly kept in mind. Hence such forms as are easily obtained in the interior are selected, and very little dissecting or microscopic work is required.

The work begins in the fall, with the study of insects, such as locusts and crickets, dragon flies, house flies, butterflies and moths, honey bees and wasps. Their life history is traced by means of a series of imported preparations, showing all stages from egg to adult (see "Equipment"), and also, as far as possible, by means of live specimens. Out-door trips are made for observing and collecting.

Other animals studied are the lobster, the spider, the centipede, the millipede, the earthworm, the fish, the frog and its development, common birds, and mammals.

Special topics are assigned for library work, lesson plans are prepared, and teaching exercises conducted as in botany.

Physiology — The course includes so much of anatomy as will make vivid the harmony between structure and function, so much of physiology as will emphasize the fundamental importance of the vital functions, and so much of personal hygiene as should be practised by one knowing his body as a physical organism, the abode and instrument of his mind, and respectful of it because of its possibilities in use, strength, and beauty.

The range of the subject is: The human body as a whole; its external and structural parts; general plan of the body; the general structure of the limbs and walls and the different systems of the body, — digestive, absorbent, circulatory, respiratory, secretory, excretory, osseous, muscular, and nervous; their functions; the conditions of health. School hygiene, sanitation, and emergency lessons receive proportional consideration, our own environment furnishing ample and proper illustrations. The kind of work is distinctly objective and practical.

Gymnastics — Health of the individual is the chief and constant consideration. Physical culture is induced by seeking to obtain ideals of physical vigor, co-ordination, and grace, by means of volitional, formal exercises, and spontaneous games, and the habit of physical expression of noble ideals. The Swedish system of gymnastics is taken as the basis. Adaptations to needs and interests of children, youth, and adults are impressed vividly.

Instruction in the theory of gymnastics is correlated closely with the study of the human body, as indicated under physiology. The physiological basis causes the importance of gymnastics as a need of personal health and as a feature of public school education to be acknowledged heartily, and leads to zealous action.

The gymnasiums are well ventilated and lighted, fully equipped, and conveniently adapted for formal exercises, games, and athletics.

Geography

The order of teaching this subject follows the characteristics of the several stages of development through which children pass. The interest and daily activity of early childhood in investigating, of later childhood in transforming, and of youth in interpreting, cause wide departures from the logical order which follows.

Geography is knowledge of the earth as the home of man.

Elementary geography is knowledge of the appearance, activities, uses, and distribution of geographical objects. This includes the three phases of work common to all studies: (1) the acquisition of ideas from the objects; (2) the expression of these ideas objectively (*e.g.,* by modelling, showing similar objects, by drawing and by symbols); (3) the reading of models, pictures, and symbols to recall and acquire ideas.

The main divisions of elementary geography are: —

Preliminary Study of Geographical Objects — This work is properly a section of nature study, and is treated as such. It includes: (1) the observation, comparison, grouping, and reasoning concerning local objects; (2) the expression of this knowledge by modelling, drawing, and the use of symbols, especially *geographic symbols;* (3) the imagination of geographical

objects and relations different from those at home, by the aid of pictures, text, and conversation; (4) the reading of maps of his own locality, of distant regions, especially of those places of which he has seen pictures. In this phase of imaginative work much emphasis is given to thinking the appearance and activity of the objects represented; location is of secondary importance.

This preliminary study includes the different elements which enter into child life, — physical, biological, and sociological. The elements most common in children's experience are the industrial and commercial, and caution is needed lest the teaching of the physical element receives undue emphasis. The physiographic conditions are but the basis of biological and sociological aspects.

The Earth a Whole — It is the first presentation to the imagination of pupils of the simple world-wide views of the earth as the home of man. Each pupil is led to feel: —

1 That the earth is a whole, a unit, having qualities or powers as a whole differing from the qualities of its parts.

2 That each part, land, water, atmosphere, and life, has its own qualities, differing from the qualities and powers of all other parts.

3 That the several parts of the whole are all *working* together to make the earth a home for man, and the means of his progress to better, nobler, higher life.

The Continents — The order and purpose in the study of each continent are to: —

1 Find what part of the world ridge, of the world drainage, of the world climate, of the world productions, of the world races, each continent includes. This is review work.

2 Find such new or peculiar details of relief, drainage, climate, soil, productions, and people as are necessary to understand and appreciate the work of the continent and its inhabitants in the development of the people of the continent.

3 Think the continent anew in its relation to the world ridge, yet with more completeness, in order to perceive more clearly the special use and influence of each continent in the development of the whole human race, and to emphasize the interdependence of continents and of people.

Especially the dependence of all life forms on geographic conditions is made prominent. So, too, the influences of past and present physiographic phenomena are noted.

The Leading Nations — The people, not the territory, are the central thought. The territory is the place of past and present activities. The relations of the geographical objects in such a territory as used and modified by man in his progress are essentially historical. Hence geography and history are inseparable in this division of the subject. The general order of thought and the aim in the study of the nations is to: (1) trace briefly their past progress; (2) find the natural advantages or disadvantages of geographic conditions; (3) find intentional use made of geographic conditions to facilitate progress; (4) ascertain with considerable fulness their present status and progress; (5) discern international relations and their effects; (6) measure their respective usefulness to mankind.

The State and its Neighbors — The study of the State is not to follow the study of nations, but from the beginning and at every stage of the course such facts as pertain to the State are culled and emphasized. At the end of the course the geography and history of the State are reviewed with great care. The teaching of the geographic conditions of the territory of the State, of the past and present usefulness of her citizens, and of the opportunities to be grasped, arouses in every pupil such a love of country, such a pride in the State, as stirs him to make her more glorious even in the future than in the past.

The City or Town — The current thought is as for the study of the State. Local geography, and local history are inseparable. The past and present place and usefulness of the city or town in any or all the relations of life are taught, with the purpose of making every child an interested, intelligent, active citizen.

Trips — Nature and man very materially add to our sources for study in this vicinity. Erosion, including the formation of limestone gorges, caverns, sinks, and a natural bridge, and other forms of water action in stream and pond, are abundantly illustrated; glacial smoothing, scratching, and deposition are prominent; and the processes of mountain building and destruction are easily demonstrable.

The industries of our manufacturing region are unusually varied, and afford admirable basis for study of industrial, commercial, and social conditions.

In order to realize these opportunities various trips are taken by the class each year. About half of these occur during school hours, and are required; the remainder, mostly Saturday excursions, are voluntary and well attended. None are made exclusively geographical, but features of biological, physical, geological, historical, governmental, and literary interest are carefully observed and discussed. The scope of observation is indicated by this list of places visited: Adams (South Hoosac) valley; Beaver (North Hoosac) valley; natural bridge; Greylock foot-hills and cascade; Greylock; cotton, woolen, paper, grain mills; Arnold Print Works; shoe shop; newspaper office. Cutlery works (Turner's Falls), Deerfield and Connecticut valleys, Deerfield, Concord, Lexington, Cambridge, Boston, and Plymouth in 1900; New York, Philadelphia, and Washington in 1901; New York, Philadelphia, Gettysburg, and Washington in 1904.

History

The course in history occupies the first half of the second year. The central thought of the course is the development of our people and institutions and the growth of present-day problems, leading to intelligent outlook upon the future.

The strong factors in this evolution of the nation, as of the individual, we believe to be three: —

(*a*) Inheritance: the influence of social and political ideas and customs, gradually evolved during the past.

(*b*) Environment: influence of the place, which conditions occupations, life, and even thoughts and ideals. In this is the key to the correlation of geography and history.

(*c*) Personal reaction or inventiveness: this modifies even environment and inheritance.

To see the force of these factors, the first part of the course is devoted to English history. Through political documents and social and religious movements the development of the English nation, with its ideals and political institutions, is traced, in order to understand the people who founded the American nation and the ideas with which they came.

The greater emphasis is given to the development of our own nation. The influence of new environment is shown from the very first in the new living and thinking forced upon the early colonists in the wilderness; the same processes continued as the pioneers pushed the frontier westward. As the first settlements grew larger, conditions of life and occupation changed and culture grew, this evolution, like the first frontier, moved westward; hence successive waves of frontiers — those of the Indian, fur trader, pioneer, farmer, manufacturer — are discovered to have moved westward. To-day we are in each section of the land approaching that phase of development where the occupations are best suited to the geographical character and possibilities.

In tracing this development we find the key to the political, financial, and social questions of each epoch of our history, and a guide to understanding present conditions and the outlook for the future. Throughout the work the emphasis must be laid, not on facts and dates, but on relations of facts and development.

It is our aim through this study to find the value of history as a school subject, and to find the way of studying and teaching the several periods, — discovery, settlement, war, administration, development. The professional side of the work is realized through observation of lessons, planning of original lessons, and practice in the training school.

Mathematics

Geometry — The scope of the work is: (1) geometric magnitudes, illustrated by models; (2) relations, measurements, drawings, descriptions, definitions; (3) study of plane figures and discovery of theorems; (4) study of solids, discovery of theorems, measurements (according to time); (5) objective and mathematical demonstration; (6) occurrence of geometric forms in nature and architecture; (7) conception of the geometric magnitudes as real, non-material, accompanying all preceding steps.

Algebra — The scope of the work is: (1) generalizations leading to laws of number, as exemplified in six fundamental processes, — addition and subtraction, multiplication and division,

involution and evolution; (2) use of axioms in solving of equations, simple and quadratic; (3) deducing of formulas, their interpretation and application, as in factoring, transformation of fractions, binomial theorem, etc.

Arithmetic — The scope of the work is: (1) number, as applied to measured quantity, as length, area, volume, capacity, weight, money values, time, etc.; (2) consideration of objects adapted to number teaching; (3) drawing, cutting, building, to find and illustrate values in relation to unit of quantities, in relation to each other; (4) six fundamental processes (see algebra), laws of number as used in each; (5) application of processes in mensuration, proportion, forms of percentage, etc.; (6) applications to actual conditions of life, — industrial, commercial, governmental, social.

English

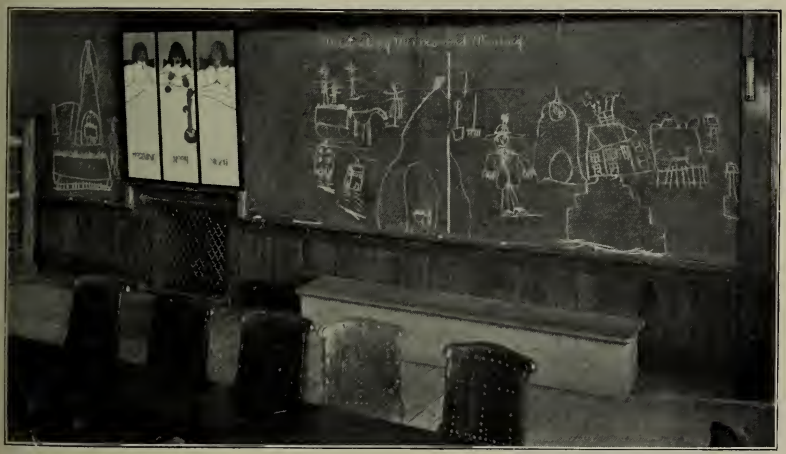
The general aim of the work in the department of English is so to acquaint the student with the many forms of English expression as to impress him with the importance of the teaching of English. Study of the student's personal experience in learning and that of children in the grades is made the basis of all study of methods. The course comprises language, grammar, composition, literature, and reading. The subjects are correlated as much as possible.

Language — The order of teaching is: (1) the significance of language; (2) what it includes; (3) the various means by which the language power and knowledge of the child are increased in the lower grades; (4) the methods and values of the forms of teaching, together with devices. Stress is laid upon story-telling, the use of pictures, letter-writing and the principles of composition. Constant practice by the student in the doing and teaching of these things is required.

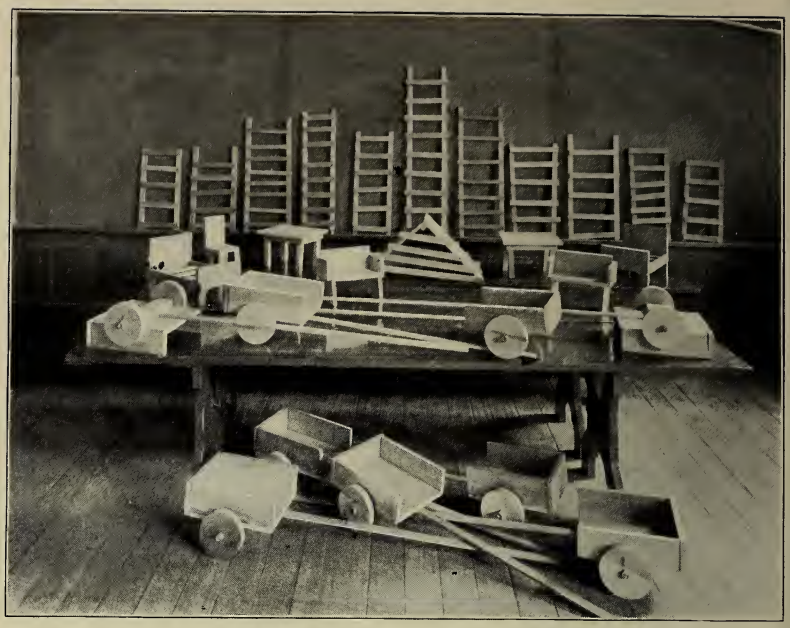
Grammar — The study of scientific grammar is pursued for its disciplinary value to the student, — for the purpose of training the mind into thinking abstract relations. The discovery of a logical order in the teaching is made, and from the knowledge thus gained elementary grammar is directly derived by the student.

Composition — The aim in this work is to lead the student to

KINDERGARTEN — COAL MINING



THREE CHILDREN'S DRAWINGS



KINDERGARTEN — WOODWORKING

HARVESTING

appreciate worthy diction and style, as exemplified in our masters of English; to recognize, through the analysis of various pieces of literature, the essential elements of good composition; and to apply this knowledge to improve his own writing and speech.

The study comprises: (1) the composition as a whole; unity of material and of aim, unity of the paragraph, proportion of parts, simplicity of structure, sequence, and movement of thought, transitions, introduction, and conclusion; (2) the paragraph: factors and modes of development; (3) the sentence: conciseness, combination of related parts, punctuation, variety, choice of words, euphony, emphasis, period, climax, balance.

Literature — The value of literature as one of the most important factors in spiritual education is emphasized. Sympathetic and appreciative rather than critical study is made of various literary productions. The aim in this course is to inculcate a desire for reading, to cultivate a taste for good literature, to uplift by giving fresh inspiration and new ideals of life. The method is reading and studying of the best things that have been written, rather than studying *about* literature and authors. The history of literature and the biography of authors are studied in so far as will aid in accomplishing the purpose of the course.

Lists of poetry, fiction, and essays are presented to the student, from which he selects a required number. The reading is carried on and reports are made to the class according to definite outlines.

Some of the masterpieces of English literature are read not only for the culture thus afforded, but for the purpose of comparing the past with the present in matter and technique; of finding out how much of the material of the past is used to-day and under what modifications; of fixing standards of judgment based upon wide reading.

Reading — The aim in this course is to give the students a knowledge of the principles that underlie the art of expression, and to develop the power to use these principles in their work.

Vocal expression is the co-ordination of mind, voice, and body in the utterance of thought and feeling, hence the training is in these directions.

Mind training — Clear thinking is the first condition of clear expression. Various selections are studied to develop the ability to think clearly the ideas and their sequence as expressed in the text. To this end narrative, descriptive and conversational prose, and lyric and dramatic poetry are studied progressively. Especial emphasis is laid on story-telling and extemporaneous speaking as means of developing in the students the power to express what they have to say simply, directly, and naturally. Myths, legends, folk-lore tales, and numerous other stories, suitable for use in teaching the various branches in the different grades, are prepared and the best means of presenting are discussed.

Voice training — Exercises are given to free the voice from limitations and acquired faults, to bring out its latent strength and purity, and put it in such a condition that it may adequately meet the demands made upon it in teaching and speaking.

Body training — Only as much of this work is given as will enable the students to bear themselves well before their schools or audiences.

Drawing

The purpose of our art study is to consider the principles governing good art, to study and enjoy examples of art embodying these principles, to give an appreciation of harmonious coloring, and to feel the connection existing between the arts, music, literature, and painting, realizing that all are governed by the same general principles. Students should be alive to see and enjoy whatever is beautiful in the world about them, and in their own work to realize that "art is simply doing whatever one has to do in the best possible way."

The class work is grouped under the following heads: Appearance, — perspective elements, pictorial drawing (single objects, grouping, and composition). Structure, — elements of form, elements of beauty, structural design. Enrichment, — color, elements of ornament, decorative design.

An abbreviated course in the history of art is carried on, parallel with these subjects, and the pupils are encouraged to collect reproductions of the world's best examples of architecture, ornament, sculpture, and painting.

The pupils use the following mediums of expression: water-

GYMNASIUM

TRAINING SCHOOL (MARK HOPKINS SCHOOL)

KINDERGARTEN — PRIMARY COURSES

color, pencil, charcoal, and blackboard crayon. Blackboard illustrative work from memory along all lines of work studied is an important feature of the course.

Music

Tone perception: listening to voice and piano; scale tones and exercises by imitation; writing from oral dictation.

Tone production: securing softness, sweetness, purity of tone; developing appreciation of beauty of tone; study of child voice.

Sight reading: daily practice in music; thinking, silent, and oral reading.

Analysis of form: developing understanding and appreciation of musical form; most important forms analyzed; illustration by voice and piano; application in appropriate phrasing, etc., in oral work.

Melody: laws illustrated; study of melodies from the symphonies, sonatas, oratorios, operas, and of the best songs; writing of original melodies; study of children's songs, with reference to selection for school use.

History: lives of eminent composers; illustrations, vocal and instrumental, to gain familiarity with types and cultivate taste for music.

Interpretation: piano playing for pupils once a week in normal school and training school; explanations of graded selections illustrating rhythm, melody, harmony, form, and adaptation to expression of emotion.

Chorus work: practice twice a week in chorus reading; a musical program given at Christmas and Easter.

Glee club: practice twice a week; two concerts given in the year; singing for pupils in training school.

Piano music and practice: The collection includes works by eminent composers, graded and progressing in difficulty to Beethoven's sonatas and Bach's fugues. A duplicate collection is in use in the training school, and a smaller collection is in the music room of Taconic Hall. Three pianos are available for students' practice.

Manual Training

The term manual training means educational handwork, — the cultivation of the hand to express the ideas of the mind.

The aim is the development of the individual through self-activity in manual expression. The work of the children consists of designing, modelling in clay, simple construction in wood, weaving, basketry, Venetian iron work, sewing, embroidery; and printing, as the ability of the pupil permits. The problems increase in difficulty as the individual gains in ability, the purpose throughout being, so far as circumstances permit, to suit the work to the needs of the individual. Relative difficulty and interest are considered important factors. The normal students follow, as far as time permits, the line of work indicated for the training school, the object of the work not being to prepare teachers of manual training, nor to furnish an adequate course for individuals in whose previous education hand training has not played an important part, but rather to demonstrate the value, and lead students to appreciate the importance, of handwork as an active factor in early education, and to prepare certain pieces of apparatus for teaching purposes.

TRAINING SCHOOL

On an adjacent lot is a modern brick building, containing twenty class rooms, an assembly hall, two large basements, playrooms, a woodworking room for the kindergarten and first primary grades, the motor and boiler rooms. In an annex is the gymnasium, forty by seventy-two feet, supplied with Swedish apparatus sufficient for the accommodation of classes of forty pupils each. All grades are represented, beginning with the kindergarten and extending through nine years of primary and grammar work to the high school. There are eighteen rooms, and in each room is a regular teacher in charge of a class not exceeding forty pupils. The principal is free for the direct observation and instruction of the normal students.

Unusual opportunities are afforded for the study of children and the practice of teaching. Students begin their work in this department immediately upon their entrance into the normal school, and continue it regularly throughout the course. The rapidity of progress through the various

stages of the training school work depends on the ability and previous experience of the student. Definite oral instruction and printed schedules guide the observation of children individually, in groups, in classes, and the observation of teaching and control. In general the order of work is as follows: —

First Year — First term: observation of individual children and of groups begun. Second term: observation of the class for prevailing and peculiar qualities; observation of teaching and control emphasized.

Second Year — Third term: study of school organization and management, and assisting in teaching and management. Fourth term: practice in teaching, the amount of responsibility conferred depending on the ability of the student.

Third Year — Responsible charge of classes, elective work. Students who have taught successfully before entering are given opportunities for practice in teaching and disciplining as early in the course as their abilities warrant.

Close and appropriate supervision and instruction are given students by the regular teachers of the several grades and by the principals of the various departments, thus insuring reasonable progress to students requiring extra opportunities in the practice work of teaching.

Equipment

The training school is bountifully supplied with the means of instruction, and the resources of the normal department are always available for daily use. Class libraries are located in each room, thus stimulating pupils to swift and sure lessons in order to get time to read in school, and encouraging them to discriminate as to home reading.

The *kindergarten department* occupies a suite of three sunny rooms which can be opened into one. The equipment is worthy of special mention. Froebel's spirit and principles are followed rather than the letter.

Toys — The collection is large and represents all the industries requiring the use of animals, conveyances, household apparatus, tools, means of production, and other forms of social life. The toys are used in free play before the opening of the session, and in guided play as occurring in the program.

Sand-table — This is an important factor in representing the conditions of industrial life. The work, whether free or guided, is distinctly constructive, collective, and increasingly co-operative, and affords the sympathy, help, and inspiration which only work with other children can give.

Enlarged material — The building gifts are in three sizes — one inch, one and one-half inches, and two inches. The children because of their greater dexterity and larger products with the enlarged material discarded the one inch material, and that is found of real value in the early primary grades. The one and one-half inch size is used for table work, the two inch material for building on the floor. Similarly, enlarged sticks, tablets, peg boards, and folding paper, etc., are in use.

Weaving — For reasons mentioned above, children do most weaving on large wooden frames, with cloth or worsted. Some very simple work is done with raffia.

Woodworking — In a corner of the basement a small workshop has been established. Small saws, hammers, and screw drivers are used in making ladders, bed frames, carts, tables, coops, etc. Children also stain the articles made.

Gardening — A large plot of ground is arranged in beds, planted, and cared for by the children. Flowers and vegetables are gathered in season and used for satisfying friendship and interpretation of life.

Cooking — The vegetables grown in the garden are cooked in the school-room, corn is popped for food and decoration, maple syrup is boiled to sugar or wax, etc., — and all to give glimpses into the meaning of life and to cultivate the simple, vital virtues.

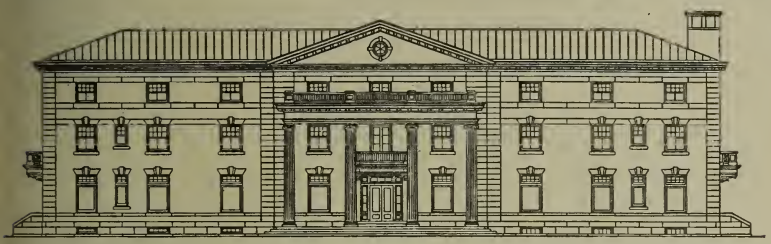
Rhythm — Special effort is made to stimulate the perception and expression of rhythm. Conversation, prose, poetry, music, pictures, and design are all used at appropriate times. Music is chiefly used; the children enjoy it most, respond to it most readily, obeying its changes promptly without aid of words from the leader. Natural movements, such as walking, hopping, run-

TACONIC HALL

ning, skipping, jumping, sliding, skating, etc., are performed with their natural rhythm, with and without music, resulting in marked freedom and control of bodily action. Rhythmic games, imitations of children's plays and of animal movements are constantly used in teaching obedience, self-control, co-ordination, and concentration.

TACONIC HALL

The material of the dormitory is yellow brick and white marble, thus carrying out the color scheme. The building is 156 feet long and 100 feet wide, the courtyard being about 58x70 feet. On account of the slope of the land the basement floor is at grade with the courtyard, thus securing dry

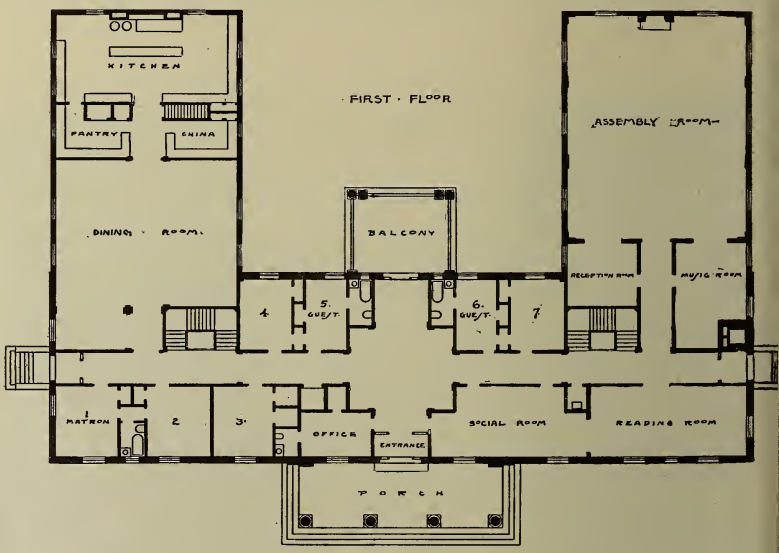


EAST-ELEVATION.

and light living rooms and making the wings as seen from the courtyard three stories high. The balcony over the east porch is available for persons living on the third floor, and the two west balconies accommodate those living on the first and second floors. Two guest rooms (5, 6) are provided for parents and friends. Two hospital rooms (41, 43), with suitable furniture and intervening bath room, are on the third floor. The building is heated by steam and lighted by electricity. A subway connects the dormitory and the school building, affording easy access to the gymnasium and protection during inclement weather.

Unusual facilities are provided for cultivating a homelike and beautiful social life. The rooms of the first floor afford opportunities for all forms of mental enjoyment, and the gymnasium in the basement is convenient for daily evening physical play, just before retiring.

LAUNDRY
DORMITORY
PLAN OF BASEMENT
GYMNASIUM
SERVANT
SERVANT
COLD STORAGE
CARRIAGE TORCH
SERVANT
SERVANT
BICYCLE STORAGE
CORRIDOR
TRUNK ROOM
SHOWER BATH
LOCKER
TOILET
INSTRUCTOR


KITCHEN
FIRST FLOOR
ASSEMBLY ROOM
PANTRY
CHINA
DINING ROOM
BALCONY
RECEPTION RM
MUSIC ROOM
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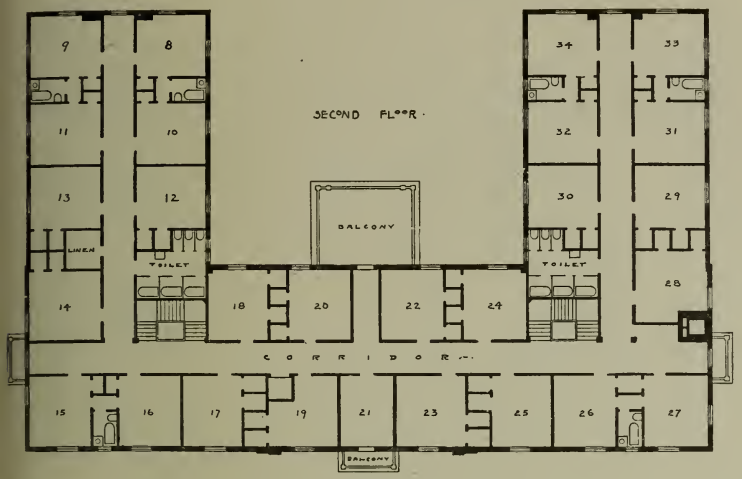
5. GUEST
6. GUEST
7
1 MATRON
2
3
OFFICE
ENTRANCE
SOCIAL ROOM
READING ROOM
PORCH


SECOND FLOOR
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TOILET
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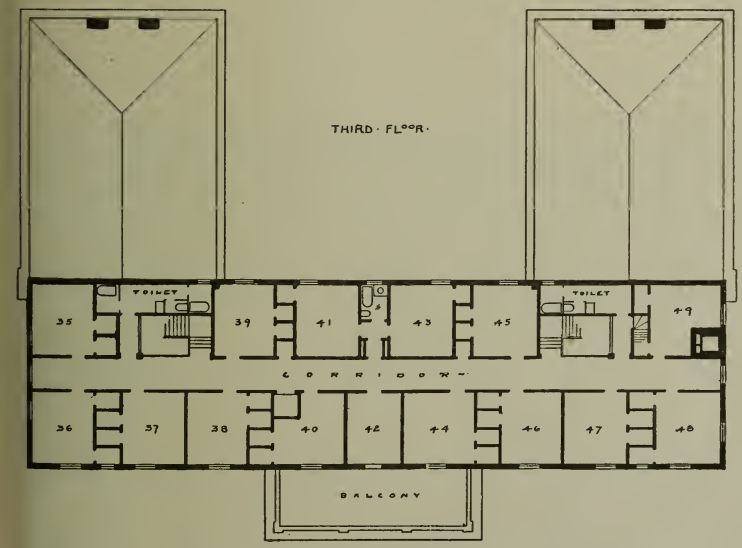
THIRD FLOOR
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TOILET
CORRIDOR
BALCONY
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Two students occupy one room. Each room is supplied with chairs, study-table, book-case, bureau, commode, screen, two couches (three feet wide), mattresses, pillows, coverlets, and rugs. Each boarder will bring bedding, towels, napkins, napkin ring, and two clothes bags.

All articles sent to the laundry must be distinctly and indelibly marked with the owner's name. *Initials will not answer.* Trunks also must be marked so as to be easily identified.

The dormitory will not accommodate all desiring to live in it. Rooms are assigned to entering students according to priority of application, preference being given to residents of Massachusetts.

EXPENSES

Tuition is free to all residents of Massachusetts. "Each pupil from another state than Massachusetts attending a normal school supported by this state shall pay to the principal of the school attended, at the beginning of each half-year session, the sum of twenty-five dollars for the use of the school."

Text-books and supplies are free, as in the public schools.

State Aid, not exceeding one dollar and one-half per week, may be granted to deserving persons after they have been in attendance for at least one term, provided they are residents of Massachusetts, and do not live in towns where the normal schools are situated.

Board — The regulations of the Board of Education require that the boarders shall pay the current expenses, which include table board, heating, lighting, laundry, and service. The price of board in each of the boarding halls connected with the normal schools of the State is $160 for the school year, payable in advance, in four payments, one every ten weeks, beginning with the opening of school in September.

The object of this payment in advance is to secure the purchase of supplies at wholesale cash prices, thereby lessen-

MUSIC READING RECEPTION

ASSEMBLY HALL

ing the cost of supplies and saving to each boarder much more than the interest of the money advanced.

Under these rates boarders are allowed to remain at the hall during the Thanksgiving recess without extra charge. Students whose homes are at a distance may, on permission of the principal, remain at the hall during other vacations, except the long one in the summer, on payment of the additional sums for such vacations. The hall is closed during the summer.

When pupils leave the school before the expiration of a term, money paid in advance will be refunded pro rata. No deduction is made for absence from the hall of less than one week.

If there are vacant rooms, those who wish to room alone may do so, on payment of the additional charge of fifty cents per week.

Employment — Capable and reliable students can reduce their expenses by assisting in the household work, for example, by waiting on table, washing silver and glass, taking care of corridors and public rooms, etc. Efficiency, need, and priority of application control the appointments. The amounts thus earned vary from $0.80 to $1.50 per week.

STUDENTS

Senior Class

Catherine Murphy Barrett	Adams
Mary Margaret Barrett	Adams
Hattie Louise Beers	Adams
Cecile Edith Bennett	Pittsfield
Katherine Kelly Burns	Stockbridge
Margaret Cecilia Burke	North Adams
Sara Anne Caley	Lenox
Florence Rozilla Chittenden	Hancock
Evelyn Burrington Coombs	Colrain (Bardwell's Ferry)
Elizabeth Evangeline Cummings	Lanesborough
Estelle Madeline Curley	Holyoke
Mary Alice Davis	North Adams
Mary Evelyn Dowding	Conway
Hellena Elizabeth Dunbar	Stockbridge
Eloise Arnold Gaston	North Adams
Bertha Helena Gleason	Clarksburg
Katherine Agnes Gleason	Pittsfield
Emma Julia Hart	Pittsfield
Margaret Loretta Lynch	North Adams
Margaret Mary Alacoque McCormac	North Adams
Margaret Evangeline Mullins	West Stockbridge
Anna Josephine Nolan	North Adams
Rose Geraldine O'Neill †	Holyoke
Laura Angenette Parker	Greenfield
Mary Agnes Parsons	Pittsfield
Florence Mary Pratt	Chelsea
Anna May Riley †	Mittineague
Loretto Mary Riordan	Indian Orchard
Edith Clara Sargent ‡	North Scituate
Edna May Searing	Stockbridge
Bessie Luella Stanford	Shelburne Falls
Mabel Sprague Ware ‡	Shelburne Falls
Jeannette Rianhard Woodward	North Adams

Senior Kindergarten Class

Loretta Agnes Boland	North Adams
Carrie Mabel Bridges	Williamstown
Elva Lillian Brownson	North Adams
Lena May Campbell,	North Adams

* Post-offices are in parentheses. † Graduated February, 1905.
‡ Graduated November, 1904.

Gertrude Glynn Congdon	North Adams
Minnie Sophia Hunter	Williamstown
Gertrude Rose March	Montague (Turner's Falls)
Ethel Vera Knight	Worcester

JUNIOR CLASS

Jennie Frances Albert	Pittsfield
Bertha Belle Bassett	Greenfield
Maude Bassett	Greenfield
Fannie Emerson Bixby	Holliston
Alice Boyd	North Adams
Agnes Leonore Burns	North Adams
Ethel Mabelle Carpenter	North Adams
Ida Rosanna Chapin	Bernardston
Eleanor Marie Cowlin	Dalton
Lena Frances Cummings	Cheshire
Abigail Frances Flaherty	North Adams
Edna Ellen Flaherty	Cheshire
Anna Aloysius Foley	North Adams
Margaret Robina Gallon	North Adams
Alice Adelia Goodnow	Wellesley
Edith Green	North Adams
Anna Lena Gunther	North Adams
Juliette Elmira Hills	Newton
Hope Hotchkiss	Shelburne Falls
Marion Cecilia Hussey	North Adams
Inez Belle Ingraham	Adams
Lucy Belle Kemp*	North Adams
Mabel Annie Knox	Chester
Margaret Lillian Lewis	North Adams
Margaret Elizabeth Leahey	Lee
Helena Butler Lyon	Southampton
Louisa Allan McCann	North Adams
Frances Gertrude McLaughlin	Lee
Teresa Wallace Morrissey	Stockbridge
Bessie Williams Nichols	Richmond
Marion McCaughan Noonan*	Great Barrington
Mary Loretta Norton	Lee
Geneva Northup Oatman	Pittsfield
Mary Ambrose O'Hern	North Adams
Una Sarah Peck	Rowe
Ethel May Plumb*	Greenfield
Bertha Mattie Rice	Conway
Florence Daggett Robinson	North Attleborough
Carrie Evelyn Smith	Buckland
Mabel Hall Thompson	Cheshire
Elizabeth Nelson Venard	North Adams
Christine LaPierre Ward	North Adams

* Entered February, 1905.

Junior Kindergarten Class

Eliza Scoville Andrews	Sheffield
Jenny Minerva Bushnell	Sheffield
Marion Cady	Mechanicville, N. Y.
Ellen J. Collins	Lee
Blanche Maverette Gillette	North Heath
Margaret Debora Irwin	Lee
Grace Emaline Thickins*	Pittsfield

Special Students

Mary Luella Amell (University of Vermont)	North Adams
Mary Boyd (Smith College)	North Adams
Christina Mary Green (North Adams Normal, '04)	North Adams
Frances Marie Cady	Ashfield
Mabel Frances Cowan	Southampton
Jennie Eliza Peirce	Hinsdale

Vacation Students

Florence Aldine Berry	New Salem
Mary Eva Cudworth	Worthington
Lottie Emily Fitzroy	Savoy (Savoy Center)
Bertha Lovina Fowler	Halifax, Vt.
Rosa Belle Hall	Buckland
Mabel Adelia Hillman	Charlemont
Grace Leola Jillson	Charlemont
Margaret Annie Longwell	Leyden (Bernardston)
Annie May Porter	Charlemont
Maude Jemina Roberts	Ashfield
Annis Ella Stacy	New Salem
Bessie Adeline Torrey	Dalton
Mabel Agnes Tower	Charlemont
Nina Evelyn Walker	Savoy (Savoy Center)
Marion Ardelle Whitney	West Marlboro, Vt.
Elizabeth Robin Wiley	Amherst

Summary

Kindergarten course		15
Senior class	8	
Junior class	7	
Regular course		81
Senior class	33	
Junior class	42	
Special course	6	
Vacation students		16
Normal graduates	1	
Other teachers	15	
Total		112

* Entered February, 1905.

Certificate Required for Admission to a Preliminary Examination.

_____ 1905.

_____ has been a pupil in the

_____ School for three years, and is, in my judgment, prepared to pass the normal school preliminary examination in the following group or groups, of subjects and the divisions thereof: —

Group II. _____ Group IV. _____

Group III. _____ Group V. _____

Signature of principal or teacher, _____

Address, _____

Certificate of Graduation and Good Character.

This is to Certify that M _____

is a regular graduate of a four years' course of the _____

_____ High School, and that, to the best of my knowledge and belief, _____ he is a person of good moral character.

_____ *Principal.*

_____ 1905.

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NORTH ADAMS NORMAL SCHOOL

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Straight mine eye hath caught new pleasures
Whilst the landscape round it measures:
Russet lawns and fallows grey,
Where the nibbling flocks do stray;
Mountains on whose barren breast
The labouring clouds do often rest;
Meadows trim with daisies pied,
Shallow brooks and rivers wide;
Flowers and battlements it sees
Bosomed high in tufted trees,—
Where perhaps some beauty lies,
The cynosure of neighbouring eyes.

MILTON.

The thunder and lightning, storm and cloud, as well as the soft beauty of colour, and the harmony of mountain outline, have been a part, and a very important part, of their training. * * On these heights such men seemed to have gained something of the strength of Him who dwells in the heavens far above their highest peaks,—"the strength of the hills," which, as the Hebrew poet says, "is His also."

HUTCHINSON, in The Story of the Hills.

STATE NORMAL SCHOOL

AT

NORTH ADAMS, MASS.

Established June, 1894

CIRCULAR AND CATALOG

For Year ending June 30, 1906

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Established 1837

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---

* On leave of absence.

CALENDAR

1906

Graduation

Tuesday, June 26, 10 A.M.

First Entrance Examination

Thursday and Friday, June 28 and 29, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 11 and 12, at 9 A.M.

School Year Begins

Training School, Monday, September 10.

Normal School, Thursday, September 13, at 9 A.M.

Thanksgiving Recess

Begins Tuesday night, November 27. Ends Monday night, December 3.

Christmas Recess

Begins Thursday night, December 20. Ends Monday night, December 31.

1907

Second Term Begins

Monday, February 4.

Spring Recess

Begins Friday night, March 22. Ends Monday night, April 1.

Graduation

Tuesday, June 25, 10 A.M.

First Entrance Examination

Thursday and Friday, June 27 and 28, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 10 and 11, at 9 A.M.

School Year Begins

Training School, Monday, September 9.

Normal School, Thursday, September 12, at 9 A.M.

Thanksgiving Recess

Begins Tuesday night, November 26. Ends Monday night, December 2.

Christmas Recess

Begins Thursday night, December 19. Ends Monday night, December 30.

Sessions are from 9 A.M. to 12 M., and 1.30 P.M. to 4 P.M. Saturday sessions are omitted.

Entrance examinations on the dates given above begin at 9 o'clock A.M., in the assembl hall. Candidates are to be present at the opening and on both days. They should com prepared to stay in September, as the term begins on the following day.

For information about the school address the principal at North Adams.

State Normal School
AT NORTH ADAMS, MASS.

LOCATION

North Adams is distinctly picturesque. The elevations that surround the city are among the most attractive of the Berkshire Hills. On the north side are rounded domes of the Green Mountains, on the east the abrupt wall of Hoosac Mountain overhangs the city, while on the south-west border rise the outlines of massive Greylock, the highest peak in Massachusetts.

On the westerly slope of an eminence rising several hundred feet above the river are situated the school buildings. Of the many beautiful locations in Berkshire County, the one chosen is remarkably fine. The near rounded domes, the deep retreating valleys, the winding streams, with all their changing life and aspects, always please and inspire. The noisy hum of the city slightly removed, the beauties of nature close at hand, the duties of student life are made easy and profitable to an unusual degree. The city of North Adams was both wise and generous in its gift of a location. Especially noteworthy are the facilities for out-door study of nature and of industry.

The city is easily reached from the east and west by the Fitchburg Railroad, from the south by the Boston & Albany road. Electric cars connect the city with Williamstown, Adams, and other towns to the south.

BUILDINGS

The school building, the dormitory, and the principal's house in exterior are of yellow brick and white marble, with metal roofs. The school building, in Italian style, is one hundred and fifty-two feet long, eighty-four feet deep, and three stories

and basement in height. It is of slow-burning construction, the floor timbering and roof being carried with steel beams and trusses. The arrangement of stairways, which are iron, gives easy and safe egress.

In the basement are the boiler, engine, fuel, heating, and repair rooms, a lunch room, a room for manual training, and a photographic dark room; in the first story, two reception rooms, cloak, coat, and toilet rooms, and four natural science laboratories; in the second story, the assembly hall, office, libraries, and class rooms for the languages and mathematics; in the third story, the physical and chemical laboratories, the art rooms, and a general class room; and in the attic is ample space for storage.

The interior is finished in oak throughout and provided with modern improvements and facilities. Cabinets, drawers, closets, specially adapted to the needs of the school, are provided in all the rooms. In strength, simplicity, beauty, and adaptation to its use the school building is not surpassed.

REQUIREMENTS FOR ADMISSION

Candidates for admission to any one of the normal schools must, if young women, have attained the age of sixteen years, and if young men, the age of seventeen years. Their fitness for admission will be determined: —

1 By their standing in a physical examination.
2 By their moral character.
3 By their high school record.
4 By a written examination.
5 By an oral examination.

Physical Examination

The State Board of Education adopted the following vote March 7, 1901: —

That the visitors of the several normal schools be authorized and directed to provide for a physical examination of candidates for admission to the normal schools, in order to determine whether

they are free from any disease or infirmity which would unfit them for the office of teacher, and also to examine any student at any time in the course, to determine whether his physical condition is such as to warrant his continuance in the school.

Moral Character

Candidates must present certificates of good moral character. In deciding whether they shall prepare themselves to become teachers, candidates should note that the vocation requires more than mere freedom from disqualifying defects; it demands virtues of a positive sort that shall make their impress for good upon those who are taught.

High School Record

It may be said, in general, that if the ordinary work of a good statutory high school is well done, candidates should have no difficulty in meeting the academic tests to which they may be subjected. *They cannot be too earnestly urged, however, to avail themselves of the best high school facilities attainable in a four years' course, even though they should pursue studies to an extent not insisted on, or take studies not prescribed, in the admission requirements.*

The importance of a good record in the high school cannot be overestimated. *Principals are requested to furnish the normal schools with records of the high school standing of candidates.* The stronger the evidence of character, scholarship, and promise, of whatever kind, candidates bring, especially from schools of high reputation and from teachers of good judgment and fearless expression, the greater confidence they may have in guarding themselves against the contingencies of an examination and of satisfying the examiners as to their fitness.

Written Examination

The examinations will embrace papers on the following groups of subjects, a single paper with a maximum time allowance of two hours to cover each of groups I, II, and IV,

and a single paper with a maximum time allowance of one hour to cover each of groups III and V (*five papers with a maximum time allowance of eight hours*): —

I *Language* — (*a*) English, with its grammar and literature, and (*b*) either Latin or French.

II *Mathematics* — (*a*) The elements of algebra and (*b*) the elements of plane geometry.

III *United States History* — The history and civil government of Massachusetts and the United States, with related geography and so much of English history as is directly contributory to a knowledge of United States history.

IV *Science* — (*a*) Physiology and hygiene and (*b* and *c*) any two of the following: physics, chemistry, physical geography, and botany, provided one of the two selected is either physics or chemistry.

V *Drawing and Music* — (*a*) Elementary, mechanical and free-hand drawing, with any one of the topics, — form, color, and arrangement, and (*b*) music.

Oral Examination

Each candidate will be required to read aloud in the presence of the examiners. He will also be questioned orally either upon some of the foregoing subjects or upon other matters within his experience, in order that the examiners may gain some impression about his personal characteristics and his use of language, as well as give him an opportunity to furnish any evidences of qualification that might not otherwise become known to them.

General Requirement in English for All Examinations

No candidates will be accepted whose written English is notably deficient in clear and accurate expression, spelling, punctuation, idiom, or division of paragraphs, or whose spoken English exhibits faults so serious as to make it inexpedient for the normal school to attempt their correction. The candi-

THE WESTERN HILLS

JUST OVER THE WESTERN HILLS

date's English, therefore, in all oral and written examinations will be subject to the requirements implied in the statement here made, and marked accordingly.

Special Directions for the Written Examinations

I Language

(*a*) *English* — The subjects for the examination in English will be the same as those agreed upon by the colleges and high technical schools of New England and now quite generally adopted throughout the United States.

1 *Reading and Practice* — A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter and spirit of the books, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of a few topics to be chosen by the candidate from a considerable number set before him in the examination paper. In place of a part or the whole of this test, the candidate may present an exercise book, *properly certified by his instructor,* containing compositions or other written work done in connection with the reading of the books.

The books set for this part of the examination are: —

1906–1908 — Shakespeare's *Macbeth* and *The Merchant of Venice; The Sir Roger de Coverley Papers* in *The Spectator;* Irving's *Life of Goldsmith;* Coleridge's *The Ancient Mariner;* Scott's *Ivánhoe* and *The Lady of the Lake;* Tennyson's *Gareth and Lynette, Lancelot and Elaine,* and *The Passing of Arthur;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

2 *Study and Practice* — This part of the examination pre-supposes a more careful study of each of the works named below. The examination will be upon subject-matter, form, and structure.

In addition, the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong. The books set for this part of the examination will be: —

1906–1908 — Shakespeare's *Julius Cæsar;* Milton's *L'Allegro,*

Il Penseroso, Comus, and *Lycidas;* Burke's *Speech on Conciliation with America;* Macaulay's *Essay on Addison* and *Life of Johnson.*

(*b*) *Either Latin or French* — The translation at sight of simple prose or verse, with questions on the usual forms and ordinary constructions, and the writing of simple prose based in part or in full on the passage selected.

The Conference on Uniform Requirements in English for Admission to College, on whose recommendations the foregoing lists of books in English and directions for study are based, advises —

1 That English be studied throughout the primary and secondary school courses, and, when possible, for at least three periods a week during the four years of the high school course.

2 That the prescribed books be regarded as a basis for such wider courses of English study as the schools may arrange for themselves.

3 That, where careful instruction in idiomatic English translation is not given, supplementary work to secure an equivalent training in diction and in sentence structure be offered throughout the high school course.

4 That a certain amount of outside reading, chiefly of poetry, fiction, biography, and history, be encouraged throughout the entire school course.

5 That definite instruction be given in the choice of words, in the structure of sentences and of paragraphs, and in the simple forms of narration, description, exposition, and argument. Such instruction should begin early in the high school course.

6 That systematic training in speaking and writing English be given throughout the entire school course. That, in the high school, subjects for compositions be taken partly from the prescribed books and partly from the students' own thought and experience.

7 That each of the books prescribed for study be taught with reference to (*a*) the language, including the meaning of the words and sentences, the important qualities of style, and the important allusions; (*b*) the plan of work, *i.e.,* its structure and method; and (*c*) the place of the work in literary history, the circumstances of its production, and the life of its author. That all details be studied, not as ends in themselves, but as means to a comprehension of the whole.

II Mathematics

(*a*) The elements of algebra through affected quadratic equations.

(*b*) The elements of plane geometry.

While there is no formal examination in arithmetic, the importance of a practical working acquaintance with its principles and processes cannot be too strongly emphasized. The candidate's proficiency in this subject will be incidentally tested in its applications to other subjects.

In geometry, the candidate's preparatory study should include independent solutions and demonstrations, — work that shall throw him upon his own resources; and his ability to do such work will be tested in the examination. An acquaintance with typical solid forms is also important, — enough, at least, to enable the candidate to name and define them and to recognize the relations borne to them by the lines, planes, angles, and figures of plane geometry.

III United States History

Any school text-book on United States history will enable candidates to meet this requirement, provided they study enough of geography to illumine the history, and make themselves familiar with the grander features of government in Massachusetts and the United States. Collateral reading in United States history is strongly advised; also in English history, so far as this history bears conspicuously on that of the United States.

IV Science

(*a*) *Physiology and Hygiene* — The chief elementary facts of anatomy, the general functions of the various organs, the more obvious rules of health, and the more striking effects of alcoholic drinks, narcotics, and stimulants upon those addicted to their use.

(*b* and *c*) *Any Two of the Following Sciences, — Physics, Chemistry, Botany, Physical Geography, provided One of the Two is either Physics or Chemistry* — The chief elementary facts of the subject selected, so far as they may be presented in the courses usually devoted to them in good high schools. It will be a distinct advantage to the candidate if his preparation includes a certain amount of individual laboratory work.

A laboratory notebook, with the teacher's endorsement that it

is a true record of the candidate's work, will be accepted as partial evidence of attainments in the science with which it deals. The original record should be so well kept as to make copying unnecessary.

V *Drawing and Music*

(*a*) *Drawing* — Mechanical and free-hand drawing, — enough to enable the candidate to draw a simple object, like a box or a pyramid or a cylinder, with plan and elevation to scale, and to make a free-hand sketch of the same in perspective. Also any one of the three topics, — form, color, and arrangement.

(*b*) *Music* — Such elementary facts as an instructor should know in teaching singing in the schools, including major and minor keys, simple two, three, four, and six part measures, the fractional divisions of the pulse or beat, the chromatic scale, the right use of the foregoing elements in practice, and the translation into musical notation of simple melodies or of time phrases sung or played.

Importance of Adequate Preparation

Candidates should measure their duty of making adequate preparation not wholly by the subjects selected and the papers set for the admission examinations, but by the larger demands their chosen vocation is sure to make upon them. The more generous and thorough, therefore, the preparation of the candidate, the greater the likelihood of profiting by the normal school, of completing the elementary course on time, of securing employment after graduation, and of doing creditable work as a teacher.

The candidate is advised, therefore, to utilize all feasible opportunities offered by the regular high school course for promoting this breadth of preparation, and the high school should aim to hold the candidate up to the higher ideals of such preparation.

Equivalents

Reasonable allowance in equivalents will be made in case a candidate, for satisfactory reasons, has not taken a study named for examination. Successful experience in teaching will be taken into account in the determination of equivalents.

Division of the Examinations

Candidates may be admitted to preliminary examinations a year in advance of their final examinations, provided they offer themselves in one or more of the following groups, each group to be presented in full: —

II Mathematics
III United States History
IV Science
V Drawing and Music

Preliminary examinations can be taken in June only.

Every candidate for a preliminary examination must present a certificate of preparation in the group or groups chosen, or in the subjects thereof, the form of certificate to be substantially as follows: —

.....has been a pupil in the .....School for.....years, and is, in my judgment, prepared to pass the normal school preliminary examination in the following group or groups of subjects and the divisions thereof: —

.....

.....

Signature of principal or teacher,.....

Address,.....

The group known as I Language must be reserved for the final examinations. It will doubtless be found generally advisable in practice that the group known as IV Science should also be so reserved.

While division of the final or complete examinations between June and September is permissible, it is important both for the normal school and for the candidate that the work laid out for the September examinations, which so closely precede the

opening of the normal schools, shall be kept down to a minimum. Candidates for the final or complete examinations are earnestly advised, therefore, to present themselves in June.

TIMES OF EXAMINATION AND ADMISSION

Examinations for admission to the normal school are held at the close of the school year in June, and also at the beginning of the school year in September, as stated in the calendar. Candidates are advised to present themselves at the first examination.

New classes are admitted to the normal schools at the beginning of the fall term. Candidates should come in September prepared to stay, as regular work begins on the day following the examinations. In exceptional cases admissions to classes already formed are allowed at the beginning of the second term.

COURSES

Elementary Course

The elementary course of study is designed primarily for those who aim to teach in the public schools below the high school grade. It comprises substantially the following subjects: —

I The study of the educational values of the following subjects and of the principles and methods of teaching them: —

(*a*) *English,* — reading, oral and written composition, grammar, rhetoric, English and American literature.

(*b*) Mathematics, — arithmetic and bookkeeping, algebra, plane geometry.

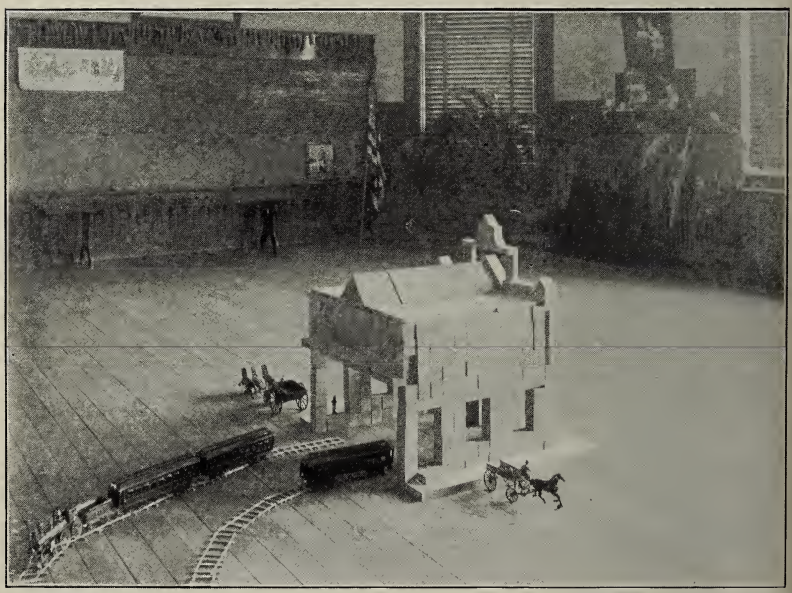
(*c*) History, — history and civil polity of the United States and of Massachusetts.

(*d*) Science, — physics, chemistry, mineralogy, botany, zoölogy, geography, physiology and hygiene.

(*e*) Drawing, vocal music, physical training, manual training.

II (*a*) The study of man, body and mind, for the prin-

KINDERGARTEN — GROUP WORK



ciples of education; the study of the application of these principles in school organization, school government, and in the art of teaching; the history of education; the school laws of Massachusetts.

(*b*) Observation and practice.

The time required for the completion of this course depends upon the students. It may not exceed two years for those of satisfactory preparation and superior ability; for others, three years are needed to do the work properly. In many cases more than two years are insisted upon. A diploma is given when the course is satisfactorily completed.

A Third Year for Practice and Study

The board of visitors and the principal of any normal school may arrange for its students a third year of study and of practice in teaching whenever, in their judgment, such action is desirable. The object is a more complete mastery of the topics arranged for the regular two years' course, as well as further experience in teaching.

For students signifying at their admission their intention of pursuing a three years' course, it will be arranged so that elective subjects may be begun early in the course, instead of being postponed to the third year.

The Kindergarten Primary Course

The principles which control kindergarten instruction apply not alone to children of three or four years but as well to the whole phase of early childhood, the period extending from two or three to seven or eight years of age. Kindergarten and primary instruction differentiate not in principle, not in general method, but in adaptation of ways and means to the tendencies and growing powers prominent at that period. The process is continuous, the objects studied vary, constructive power widens in application, the use of symbols becomes increasingly prominent. The course as planned and practised

trains teachers to work in the kindergarten with due regard to succeeding years of growth of children, and in the primary grade with due regard to previous training and later growth. For such teachers the demand far exceeds the supply.

The kindergarten primary course is a modification of the elementary course (see page 16) and requires two years at least for completion. The greater portion of the practice teaching may be done in the primary or kindergarten grades as the student may choose.

To enable students to become competent principals of kindergartens a third year of advanced kindergarten study and responsible control has been arranged. Different children attend the afternoon kindergarten and their instruction is given into the charge of graduate students of ability, under the general supervision of the principal of the department. Similar facilities are afforded for study and practice in the first grade primaries. Graduate students of marked ability are paid a small salary, sufficient to pay living expenses, during the third year. A special diploma is given to students completing satisfactorily the graduate course.

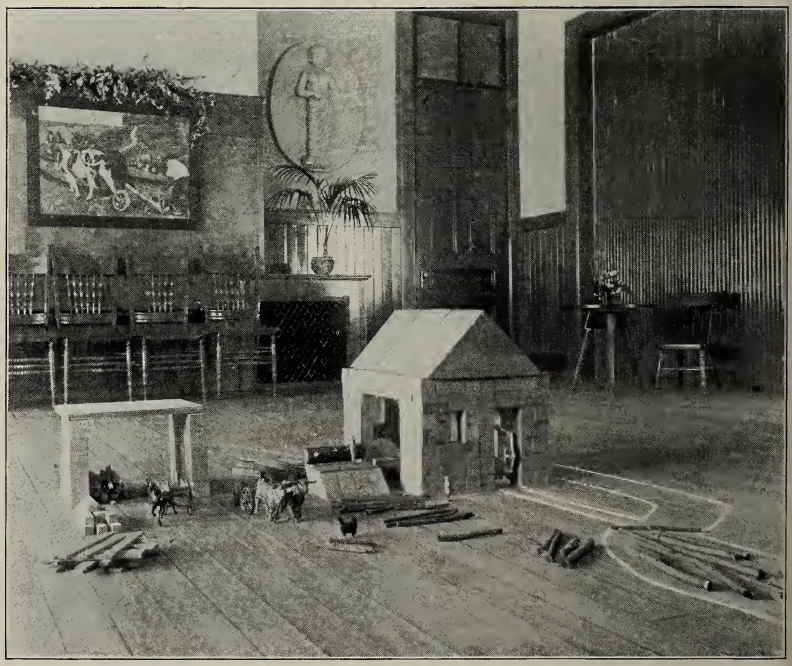
The conditions of admission are the same as for the elementary course. In addition, there should be some facility in playing the piano and singing, if the better positions are to be secured. Students pay the cost of material taken away, but this expense does not exceed ten dollars for the course.

For further details see page 41.

Special Courses for Teachers

Teachers of several years of successful experience in teaching, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal and of the board of visitors, select a course (including the course in psychology and pedagogy), and when such course is successfully completed they shall receive certificates for the same. Candidates are admitted to this course without written examination.

KINDERGARTEN — LUMBERING



THE SAW MILL

Teachers desirous of spending their vacations at the school are cordially invited to come at any time. Observation work, study of elected subjects, or participation in regular course work and preparation of teaching material, are offered in all departments of the normal and training school. There will be afforded every facility for study, the work being adapted to the wishes and capabilities of applicants, in so far as the permanent needs of the school permit. For subjects see page 24.

Special Course for College Graduates

Graduates of colleges and universities, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal of the school and of the board of visitors, select from the above curriculum of study a course which may be completed in one year, and when such course is successfully completed they shall receive a certificate for the same. Candidates are admitted to this course without written examination.

EQUIPMENT

The four natural science laboratories are arranged in sequence, and by means of specimens and models in well-lighted wall cases is displayed the progression of mineral, plant, and animal life to its final development in man. Banks of drawers are provided in the laboratories for collections of the varieties of each type displayed in the wall cases. At the table are drawers for the working collections and tools distributed to students. In the instructors' laboratories are reserve specimens, models, pictures, charts, and diagrams.

Worthy of special mention are the following materials for study: —

The synoptic and Howell's college collection of minerals and rocks in the mineralogical and geological laboratory.

In the biological laboratories are the Deyrolle plant models, illustrating twelve of the leading families; the synoptical collec-

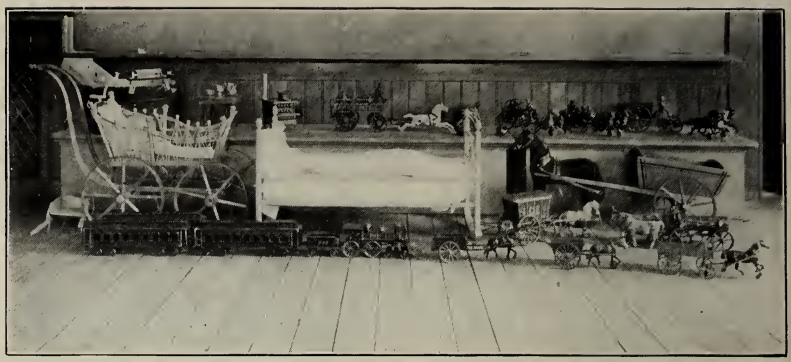
tion of invertebrates and vertebrates; the preparations (wet and dry) showing the habits, homes, and metamorphoses of many insects, the development of a snail, a leech, a crayfish, a horseshoe crab, a spider, a fish, a salamander, a frog, a toad, a snake, and a lizard, displaying all stages of growth, from the egg to the adult form; dissected specimens of a clam, a crayfish, a lobster, a fish, a frog, a lizard, a turtle, a dove, and a rat, displaying separately the digestive, circulatory, and nervous systems; aquaria and cages; a series of skeletons, a human skeleton, a life-size manikin, a set of Auzoux models (eye, ear, larynx, brain, pelvis), and preserved vital organs.

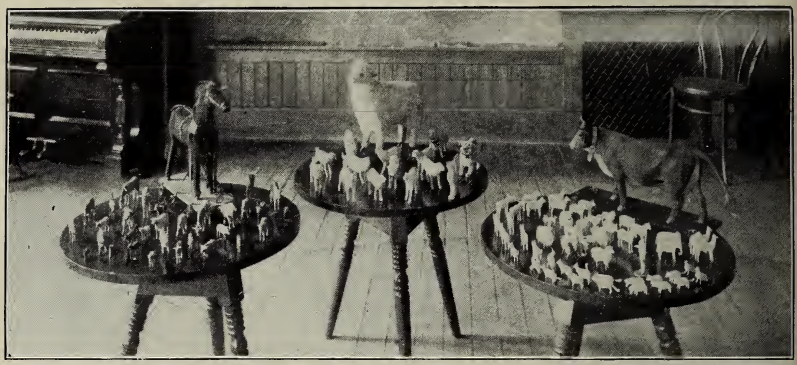
In the geographical laboratories are several thousand carefully selected, mounted, and classified pictures, including photographs, engravings, half-tones, bromide enlargements, the Hölzer series of oleographs, and several hundred lantern slides. The models include the Jones eighteen-inch relief globe, Howell's (sixteen feet radius) model of the United States, and a large model of southern New England, the Harvard series of physiographic models. Slated spheres, large and small globes are provided for class and individual use. Three sand-tables, each ten feet by four feet, afford abundant opportunities for sand modelling.

The collection of maps includes two maps of Switzerland, one beautifully shaded to show reliefs and drainage, and the other to show the same physical features combined with political and industrial features; two similar maps of Alpenland; Habenicht-Sydow physical series; Johnston political series; a series of thirty world maps, showing physical, productive, and political features; coast survey charts; topographic maps and folios; a series of maps of Massachusetts, showing relief, drainage, cities, railways, counties, etc.; similar maps of Rhode Island and New Hampshire; a series of maps for study of map symbols; pamphlets, railway folders, magazines, etc., for commercial geography.

The mathematical department is supplied with collections of models for individual use and class observation in the study of geometry, arithmetic, and algebra in their appropriate development through all grades, including those of the high school.

The historical and literary departments are supplied with several hundred classified pictures and numerous charts.





The art departments are equipped with adjustable tables, models, type, and ornamental forms, pictures, drawings, and casts, illustrative of the phases of modern art teaching.

The library has been selected with especial reference to the needs of teachers. Department libraries are proportionately represented, and furnish excellent opportunities for general reference work and special investigation. Magazines and pamphlets for general culture and departmental study are numerous, the pamphlet division already including several thousand copies.

The three laboratories for physics and chemistry are equipped with modern improvements, and with apparatus for individual experimentation in both qualitative and quantitative work.

The manual training room is furnished with twenty-five sloyd benches and tools for working in clay and wood.

The gymnasium is located in the dormitory and is equipped with the apparatus for the practice of Swedish gymnastics and a system of shower baths. See page 44.

An electric projection lantern and numerous slides have been provided. The lantern can be used in six different rooms, and supplements the work in the various sciences, in literature, and in art.

DESIGN OF THE NORMAL SCHOOL

"The design of the normal school is strictly professional; that is, to prepare in the best possible manner the pupils for the work of organizing, governing, and teaching the public schools of the Commonwealth" (Board of Education, May 6, 1880).

The work of each department is to secure these ends: —

Pupils — The leading motive and continuous effort are to change the pupil's point of view from that of the student to that of the teacher, to inspire him with the spirit of the true teacher, to train him to the noblest ideals and best habits of personality, thinking, and teaching.

Children — The pupil is placed from the beginning of his course in close contact with children, that through them there may be revealed to him such understanding of child life in

general and appreciation of the individual children as will impress upon his mind the necessity of their interests being his chief concern. That schools should be organized to satisfy the needs of children, that school management is the process of securing self-control by the children, that children should be taught, rather than subjects, are truths which are presented as of fundamental importance.

Subjects — The thought of the pupil is carefully directed to the subjects of a public school course. Each subject is analyzed to find its content, its natural or logical order, its teaching order. The appropriate sources of knowledge are found, the prominent processes of acquisition are emphasized, and corresponding forms of expression exemplified. The knowledge, disciplinary and cultural values of each subject are discussed. Stress is laid upon accuracy of knowledge and the use of each subject as a *means* and not an end in education. Natural and helpful correlations of subjects are made, and the place of each in a course of study indicated.

Teaching — The process of learning is distinguished from the process of teaching, the pupil being led to perceive most definitely that in learning the student concentrates his thought upon the object, that in teaching the teacher concentrates his thought upon the student's mental process of learning. Pupils are led to discover by personal observation that the teaching process consists of two parts, namely, preparatory thought (*i.e.,* lesson planning) and consequent instruction (*i.e.,* teaching). Lesson plans are derived by the pupils from observed teaching and the study of typical plans, and are found to include consideration of (1) aims, that is, needs of the children to be satisfied; (2) right mental activity of the child; (3) appropriate sources of knowledge and interest. Lesson teaching is perceived to be (1) skillful use of sources of knowledge and interest, (2) which use stimulates right activity in each child, (3) and enables him to satisfy his needs. Pupils, by practice

in writing lesson plans and in teaching children in accordance with the plans, become certain that intimate knowledge of children and thorough lesson planning are, together with the personality of the teacher, the vital conditions for successful teaching; that lesson plans may free the teacher of the burden of the subject, and enable him to attend discreetly and heartily to the needs and interests of the children. Similarly, the place and purpose of recitations, drills, examinations, and criticism are brought before the pupils for consideration and judgment.

Organization — The principles underlying the organization of a school are arrived at by the pupils by direct study of the training school and other schools they have experienced, by consideration of children's needs as individuals and as members of society, and by use of the experience of teachers and other educational authorities.

Government — Pupils are led, by review of their own experiences in conforming, obeying, and controlling, by the testimony of others, by their knowledge of children, by their efforts in the training school, and by their study of psychology, to understand the relations between knowing, feeling, and doing, to value and use the instinctive reactions, and to attempt to form habits in themselves and children of right self-activity for the sake of self-development and service to others.

The school laws of the State receive due and appropriate study, in connection with the consideration of organization, government, and the history of education.

Order of Studies in the Elementary Course

Junior Class		Senior Class	
First Term	Second Term	Third Term	Fourth Term
Drawing 3	Drawing 3	Drawing 3	–
Music 4	Reading 3	Grammar 3	Reading 3
Manual training 2	Gymnastics 2	Gymnastics 2	Gymnastics 2
Language 1	–	Literature 3	Literature 3
Chemistry 4	Physics 4	Geography 4	Geography (half term) 5
Mineralogy 2	Botany 2	Zoölogy 2	History of education, school laws (half term) 5
Physiology 3	–	History 4	
Geometry 4	Algebra 4	–	Psychology and pedagogy 5
Penmanship	Arithmetic 4	–	–
Child study: — 4 Individuals Groups	Observation of teaching and control. Assisting 4	School organization 1 Teaching at training school 4	School management 1 Teaching and control (half term) 10
Kindergarten course omits chemistry and part of geometry	Kindergarten course omits algebra	Kindergarten course omits drawing and history	Kindergarten course omits geography and literature

Note — Figures indicate the number of periods per week.

THE RANGE OF THE SUBJECTS

The professional work is indicated in general on pages 21–23, under the topic, "Design of the Normal School," but applies in detail to each of the subjects analyzed and described as follows. Accuracy and fulness of scholarship are strenuously emphasized.

Psychology and Pedagogy

The study of children is continuous throughout the whole course. Individual children are carefully observed to ascertain individual physical, mental, and moral aptitudes and defects, in order that each child's needs may be satisfied. Groups of children — the healthy and the sick, the able and the weak, the bright and the dull, the tidy and the slovenly, the leaders and the followers, the good and the bad, etc. — are found, and their relative numbers

and importance estimated, that justice may be done to all. Based on these and similar observations made elsewhere are the students' conclusions as to native reactions, behavior, self-control, and tact.

In their study of individual subjects of the course, students are taught to recognize the elementary processes of acquisition, the emotions aroused, the importance of interest, and the volitions resulting. The sources of knowledge, the stimuli of interest, the mental processes appropriate to the several subjects, and the conditions in general for right mental activity in each subject, are learned as individual facts.

In the observation and practice of teaching, effects of the teacher's knowledge of children, of subject, of fitness of mental process, of the influence of tact, of the possession of right habits are discerned.

During the last term of the course, the systematic study of man as an educable being is based upon the child study, the analysis of subjects, and the observation and practice of teaching previously described. The purpose of this course is to organize into attitude and habit, as thoroughly as possible, the following propositions.

The present characteristics of body and mind in men are evolutionary products.

Every child is the result of countless generations of developmental changes both in body and mind.

Growth includes fundamentally the repetition by body and mind of the essential features of race progress. The phases of life — infancy, early childhood, later childhood, adolescence, adult life, and old age — are racial metamorphic periods, necessarily with distinctive characteristics.

The reflexes, instincts, and forms of consciousness of childhood are noticeably hereditary habits or tendencies, and are relatively stable.

Individuality is partly inherited, partly acquired.

Environment includes the inherited and acquired characteristics of one's own body and mind, as well as the physical surroundings of outer life.

Education is possible and necessary because a child is born with relatively few organized habits.

Education is under the immediate control of others for nearly one-third of life because of the ever-increasing variety and complication of experiences necessary to obtain higher success in living.

Education never ceases, and should be intelligently adapted to the characteristic needs of each phase of life.

Professional preparation for teaching is coming into conscious intelligence, and correct habits of directing the inherited tendencies and habits of the learner, under the influences of improving environment, into the acquirement of ever-increasing power of truth, beauty, and goodness, expressed in human conduct.

Professional preparation is the organization into habits of thought and practice (1) of discriminating knowledge of the evolutionary progress of man, (2) of the present physiological functions, (3) of the present mental functions, (4) of the interdependence of body and mind, (5) of the conditions necessary for right activity of body and mind. The present physiological functions of man are studied under the topics Physiology and Zoölogy and are reviewed in this course. The present mental functions are consciously investigated by the systematic study of children and adults, individuals and groups; by introspection; and by the testimony of others. The conditions of right activity for learning and teaching are apprehended by studying the ways and means in which the needs of children are satisfied; by analysis, organization, and correlation of knowledge into conditions favorable to mental growth; by the application of principles during the practice of teaching.

Principles of psychology and pedagogy are apprehended and appreciated because of their guidance of thought processes, their productiveness of interest and certainty, their determination of method. The study of psychology and pedagogy is for the illumination and inspiration of teaching.

School Organization and Management

These subjects are studied in a manner very like that described above. Observation and induction are the major portion of the process. The training school serves as the model of a school for children, the normal school as one for youth.

History of Education

The aims of this course are: —

1 To discover the progress of educational theory and practice.

2 To discuss the aims, method, and result of each.

3 To discuss the meaning and value of principles of education as evolved.

4 To find one's need of gaining inspiration from others.

5 To stimulate the desire to know the practice of other individuals and nations.

6 To liberalize, — foster the creative rather than the imitative spirit.

In the conduct of this course each pupil is provided with a brief compendium of the history of education as a foundation for his work; and a departmental pedagogical library is provided for reference use. Each pupil outlines the assigned topic for oral or written recitation, and free criticism follows. Frequent assignments of special subjects for investigation and report are made. Whenever feasible, educational theories and practices are illustrated in the conduct of the regular recitation.

School Laws of Massachusetts

The purpose of this course is to make the students familiar with the principal powers, duties, and relations of teachers, pupils, and other parties directly concerned in school work as defined in the Revised Laws. To this end, brief consideration is given to law, — its relation to custom, as subsequent rather than precedent; its purpose, in defining and unifying practice; its kinds, — permissive, compulsory, and prohibitory. The more important laws are then analyzed; and the several powers and duties granted and forbidden to each of the parties finally summed up and classified.

Nature Study and Natural Science

In the work in the natural sciences there are sought constantly the knowledge, the interest, the training needed by those who are to teach nature study and related subjects in elementary schools. Hence the aim is to cause the prospective teacher to possess and to be able to cultivate in others "what may be termed the ele-

mentary equivalent of the genuine scientific spirit, so that out of his native fondness for things about him shall come an enthusiastic truth-seeking, reverent attitude toward nature," an appreciation of the beauty, harmony, and inviolability of nature's laws; together with some mastery of the means for subduing nature's forces and utilizing them for his own protection and development and for the social good.

Mineralogy — Each student is assigned a place in the laboratory, and is provided with apparatus and typical specimens (see "Equipment," page 19).

He is taught to recognize and name a considerable number of minerals and rocks by practice in distinguishing their physical properties. A smaller number of the most common and useful minerals, with their varieties and the rocks in which they occur, are studied in greater detail. Special stress is laid upon such as can be found in the neighborhood of the school, and upon the uses of mineral bodies for manufacturing, building, and decorative purposes.

Students are led to see the value of such work in developing the power and the habit of close observation, critical comparison, and nice discrimination; also in cultivating interest in common things, and utilizing the collecting instinct of children for their education.

A few chemical tests are taught, and other interesting correlations made with the study of chemistry going on at the same time.

Each student is assigned a topic for special research, the results of which are presented to the class. This gives training in the use of books and in the orderly arrangement of subject-matter for teaching purposes. Each is required to make a collection of minerals and rocks of the region, and to illustrate the assigned topic; and field excursions to several interesting localities are made for this purpose.

Chemistry — The following are some of the topics considered: nature of chemical change, oxygen, nitrogen, air, hydrogen, water, the forms of carbon, carbon dioxid, coal, illuminating gas, combustion and flame, foods, respiration, fermentation, manufacture of lime, iron and glass, acids, alkalies, salts. The metric system of weights and measures is used.

Each student prepares simple apparatus and performs experiments (see "Equipment," page 19), being guided to the proper interpretation of the observed results by printed questions and directions. Ability to use experiments in teaching is especially sought. Those who work faster or who have had the subject-matter before are given extra exercises, adapted to their ability, to present before the rest of the class.

The laboratory work is followed by class discussions, and notes on each experiment are written, which are expected to be in good form, correct in English, and to cover the following points: —

1 Purpose of the experiment (topic to be illustrated).

2 Apparatus (what we use).

3 Experiment (what we do).

4 Results or observations (what we learn by the senses).

5 Inferences and explanations (what we learn by thinking, reading, etc.).

6 Applications (what things in every-day life, in nature, in other studies, the experiment may be used to teach or illustrate).

In addition to the individual laboratory work, students perform assigned experiments before the class, and question their classmates about the results and their explanations. They also conduct experimental work in the practice school.

Special attention is given to the applications of experiments in explaining the facts of common life, or of other studies, such as mineralogy, human physiology, and nature study. Visits are made to the gas works, a lime kiln, and an iron foundry.

Physics — From the view point of interest and daily experience, the subject is introduced by observational study of the machinery, tools, and utensils of the various mechanical departments. The following apparatus is studied in considerable detail: boilers (high and low pressure), gauges, thermometers, radiators, flues, valves, packing, weigh-scales, steam engine, fans, steam kettles, steam traps, pumps, water heaters, water supply, plumbing; gymnasium apparatus, elevator; electric wiring, dynamo, projection lantern, transformers, lighting apparatus, batteries, bells, clocks, telephones, gas pipes, meters, burners, etc.

From the view point of the subject, those portions are selected which, it is thought, will be most useful to teachers in elementary

schools, such as: pressure in water and air, with applications to city water systems, artesian wells, hydraulic press, specific gravity methods, barometer, pumps, siphon, breathing, etc., nature, properties, and states of matter; simple machines, and the conservation of energy; heat, and its manifold applications, magnetism, and electricity.

The school is well supplied with apparatus; but special pains is taken to teach students to improvise, from such materials as may be gotten anywhere, inexpensive apparatus, which they may take into the schools to illustrate the simpler facts of physics, physical geography, and human physiology.

The work is chiefly qualitative, but, wherever possible, computations based upon measurements made in the experimental work are the means of correlating physics and mathematics and of securing greater power in both.

Drawings or diagrams are required when they can be made to aid in the expression of conditions and results.

Botany — Plant-growing is the most significant feature of the course, that life as growth may be understood, enjoyed, and made the end of learning and teaching. By the actual daily process of growing plants, they come to be not simply intelligible, but beautiful, wonderful, and useful.

In the autumn bulbs of many kinds are planted by each student, and covered properly until roots are well grown. In due season they are removed to the various rooms of the school buildings and dormitory, and enjoyed from day to day. Interest in appearance, leafing out, budding, and flowering are as great as the feeling of beauty; and the fundamental sympathetic attitude toward nature knowledge and nature teaching is thus secured.

In midwinter definite instruction begins. Hyacinths, tulips, crocuses, and all the rest are studied, to ascertain their mode and condition of growth. Structure and function are learned incidentally, but none the less efficiently. Twigs and winter buds of trees and shrubs are put in water, and their development watched and compared with that of bulbs.

Geraniums or similar plants are now grown. They, too, have been watched and enjoyed incidentally through the preceding months. Green wood cuttings are made by each student and

rooted in water or various soils. Young plants are potted, cultivated, pruned, and finally set out in the gardens. An extended knowledge of structure and function, of adaptation to environment, are secondary but permanent results.

Seeds of many annual herbaceous plants are now planted in shallow boxes filled with various soils. Young plants are thinned out, transplanted, some potted in tins or cheap paper pots, and finally set out in the gardens. This experience leads directly to gardening. To knowledge and enjoyment of plants are added interest and intelligence as to soils and the processes preparatory to planting. Simple experiments are performed by members of the class, to show how plants live and grow, and to illustrate the fundamental principles upon which successful plant-rearing depends.

With the opening of spring a tract of land is plowed and harrowed, a section is assigned to each student, who then does all the work of making and caring for her garden. Flowers and vegetables are grown. Appropriate records are kept. Botanical instruction arises from the processes of growing plants.

Due correlation with other sciences, with drawing, and with arithmetic, are made as the incidents of the work occur.

Assisting in the children's gardens follows as a matter of course, with the last and best of results, — the knowledge and ability to have window or out-door gardens in the schools to which students go.

Zoölogy — A series of typical animals is so studied as to make out their plans of structure and the adaptation of their structure to habits and surroundings. Related forms are compared with these, and some idea of classification is developed. Each student examines both live and preserved specimens, furnished by the school or collected by himself, being guided by definite directions and questions for thought. The facts observed are expressed by labelled drawings and by written statements.

The use that may be made of the material in giving animal lessons in elementary schools is constantly kept in mind. Hence such forms as are easily obtained in the interior are selected, and very little dissecting or microscopic work is required.

The work begins in the fall, with the study of insects, such as

locusts and crickets, dragon flies, house flies, butterflies and moths, honey bees and wasps. Their life history is traced by means of a series of imported preparations, showing all stages from egg to adult (see "Equipment"), and also, as far as possible, by means of live specimens. Out-door trips are made for observing and collecting.

Other animals studied are the lobster, the spider, the centipede, the millipede, the earthworm, the fish, the frog and its development, common birds, and mammals.

Special topics are assigned for library work, lesson plans are prepared, and teaching exercises conducted.

Physiology — The course includes so much of anatomy as will make vivid the harmony between structure and function, so much of physiology as will emphasize the fundamental importance of the vital functions, and so much of personal hygiene as should be practised by one knowing his body as a physical organism, the abode and instrument of his mind, and respectful of it because of its possibilities in use, strength, and beauty.

The range of the subject is: The human body as a whole; its external and structural parts; general plan of the body; the general structure of the limbs and walls and the different systems of the body, — digestive, absorbent, circulatory, respiratory, secretory, excretory, osseous, muscular, and nervous; their functions; the conditions of health. School hygiene, sanitation, and emergency lessons receive proportional consideration, our own environment furnishing ample and proper illustrations. The kind of work is distinctly objective and practical.

Gymnastics — Health of the individual is the chief and constant consideration. Physical culture is induced by seeking to obtain ideals of physical vigor, co-ordination, and grace, by means of volitional, formal exercises, and spontaneous games, and the habit of physical expression of noble ideals. The Swedish system of gymnastics is taken as the basis. Adaptations to needs and interests of children, youth, and adults are impressed vividly.

Instruction in the theory of gymnastics is correlated closely with the study of the human body, as indicated under physiology. The physiological basis causes the importance of gymnastics as a need of personal health and as a feature of public school education to be acknowledged heartily, and leads to zealous action.

The gymnasiums are well ventilated and lighted, fully equipped, and conveniently adapted for formal exercises, games, and athletics.

Geography and History

The courses in geography and history are correlated to harmonize with the nature of the child. Three stages of development recognized may be designated the experiential, informational, and rational.

During the first stage (early grades) there is to the child little or no distinction between geography and history as such. The child eagerly seeks all forms of experience in and with his environment. He watches and imitates those about him, and thus learns through his own experience; he listens to tales of the deeds of others remote in time or in space, and these he tests by imitation and invention.

In the second stage (middle grades) the child is pre-eminently an ardent explorer. He roams more widely over the streets of his city or the fields of his country home, — to extend his material, industrial, and social environment. Beyond the limits of what he can actually visit he roams with the traveler, seeing other and stranger parts of the world; or with the story-teller and historian to other times, — in his own home and elsewhere. When he reads of the explorers and settlers, he sees new lands with them and gets new information about this old earth; or he follows their deeds and conquests, delighting in their biographies. When he reads of social or industrial leaders or inventors, he lives with them in their social environment, enjoying the geography of earlier times; or he compares past life with present, and traces historical growth. He gathers the most of this information through the use of books, pictures, maps, and other symbols. Through these middle grades information widens rapidly; books and maps become prominent; knowledge begins to be organized and distinguished as geography and history. Yet the interest and the kind of study are essentially identical.

The third stage of rational geography and history (later grades) makes use of causal reasoning, and leads to appreciation of the close mutual relationship of these subjects. Such causal relationships are the interaction and interdependence of geographical objects, — inanimate, animate, and human. In geography we at-

tend, for example, to the effects of rotation and revolution of the earth in zones of light and belts of heat, winds, rainfall, and vegetative regions upon man's life; and, as well, to man's reaction upon his environment. The development of economic life, whereby man changes from his immediate to his adjusted dependence upon his environment, the development of social and political customs, of government, religion, nationality, and world influence, are also causal. They are important elements in history. All mentioned are factors needed to understand present-day geography.

Such principles are applied in geography in the careful study of continents. The effects of configuration, surface, climate, etc., on man and of man upon them are found; this leads to the peculiar usefulness and opportunity of each. It is natural then to turn to the thought of the nations most prominent to-day. From the land in which each nation developed to the regions which it developed in turn or now controls, one is led directly to the nation's relation to other nations, to its proportion of influence in world development, to the interdependence of nations, and the progress toward world unity.

In history the thought is more fully expanded, since confined to a much more restricted environment, — that of the United States, — with more attention to details of the process of development. More emphasis is laid upon the industrial, social, and moral relations of man with man. Our history is a progressive development in an expanding environment, with increasing world influence and importance in economic, social, and political lines.

The latter part of the grammar school work should look more distinctly to citizenship (political responsibility) through the study of civics, and to business responsibility through consideration of the world supply and distribution of commercial articles.

The work of the normal department is to find these phases of development, and to see how the subject-matter may be used to meet the needs of children. In the training department specific application is made in the teaching of children. For the sake of fuller knowledge and for illustration of the way of study and of teaching, specific instruction in rational geography and history is necessary; particularly in the relation of our own national contribution to the world problem of government, through the development of English representative institutions.

Mathematics

Geometry — The scope of the work is: (1) geometric magnitudes, illustrated by models; (2) relations, measurements, drawings, descriptions, definitions; (3) study of plane figures and discovery of theorems; (4) study of solids, discovery of theorems, measurements (according to time); (5) objective and mathematical demonstration; (6) occurrence of geometric forms in nature and architecture; (7) conception of the geometric magnitudes as real, non-material, accompanying all preceding steps.

Algebra — The scope of the work is: (1) generalizations leading to laws of number, as exemplified in six fundamental processes, — addition and subtraction, multiplication and division, involution and evolution; (2) use of axioms in solving of equations, simple and quadratic; (3) deducing of formulas, their interpretation and application, as in factoring, transformation of fractions, binomial theorem, etc.

Arithmetic — The scope of the work is: (1) number, as applied to measured quantity, as length, area, volume, capacity, weight, money values, time, etc.; (2) consideration of objects adapted to number teaching; (3) drawing, cutting, building, to find and illustrate values in relation to unit of quantities, in relation to each other; (4) six fundamental processes (see algebra), laws of number as used in each; (5) application of processes in mensuration, proportion, forms of percentage, etc.; (6) applications to actual conditions of life, — industrial, commercial, governmental, social.

English

The general aim of the work in the department of English is so to acquaint the student with the many forms of English expression as to impress him with the importance of the teaching of English. Study of the student's personal experience in learning and that of children in the grades is made the basis of all study of methods. The course comprises language, grammar, composition, literature, and reading. The subjects are correlated as much as possible.

Language — The order of teaching is: (1) the significance of language; (2) what it includes; (3) the various means by which the language power and knowledge of the child are increased in

the lower grades; (4) the methods and values of the forms of teaching, together with devices. Stress is laid upon story-telling, the use of pictures, letter-writing and the principles of composition. Constant practice by the student in the doing and teaching of these things is required.

Grammar — The study of scientific grammar is pursued for its disciplinary value to the student, — for the purpose of training the mind into thinking abstract relations. The discovery of a logical order in the teaching is made, and from the knowledge thus gained elementary grammar is directly derived by the student.

Composition — The aim in this work is to lead the student to appreciate worthy diction and style, as exemplified in our masters of English; to recognize, through the analysis of various pieces of literature, the essential elements of good composition; and to apply this knowledge to improve his own writing and speech.

The study comprises: (1) the composition as a whole; unity of material and of aim, unity of the paragraph, proportion of parts, simplicity of structure, sequence, and movement of thought, transitions, introduction, and conclusion; (2) the paragraph: factors and modes of development; (3) the sentence: conciseness, combination of related parts, punctuation, variety, choice of words, euphony, emphasis, period, climax, balance.

Literature — The value of literature as one of the most important factors in spiritual education is emphasized. Sympathetic and appreciative rather than critical study is made of various literary productions. The aim in this course is to inculcate a desire for reading, to cultivate a taste for good literature, to uplift by giving fresh inspiration and new ideals of life. The method is reading and studying of the best things that have been written, rather than studying *about* literature and authors. The history of literature and the biography of authors are studied in so far as will aid in accomplishing the purpose of the course.

Lists of poetry, fiction, and essays are presented to the student, from which he selects a required number. The reading is carried on and reports are made to the class according to definite outlines.

Some of the masterpieces of English literature are read not only for the culture thus afforded, but for the purpose of comparing the past with the present in matter and technique; of find-

ing out how much of the material of the past is used to-day and under what modifications; of fixing standards of judgment based upon wide reading.

Reading — The aim in this course is to give the students a knowledge of the principles that underlie the art of expression, and to develop the power to use these principles in their work.

Vocal expression is the co-ordination of mind, voice, and body in the utterance of thought and feeling, hence the training is in these directions.

Mind training — Clear thinking is the first condition of clear expression. Various selections are studied to develop the ability to think clearly the ideas and their sequence as expressed in the text. To this end narrative, descriptive and conversational prose, and lyric and dramatic poetry are studied progressively. Especial emphasis is laid on story-telling and extemporaneous speaking as means of developing in the students the power to express what they have to say simply, directly, and naturally. Myths, legends, folk-lore tales, and numerous other stories, suitable for use in teaching the various branches in the different grades, are prepared and the best means of presenting are discussed.

Voice training — Exercises are given to free the voice from limitations and acquired faults, to bring out its latent strength and purity, and put it in such a condition that it may adequately meet the demands made upon it in teaching and speaking.

Body training — Only as much of this work is given as will enable the students to bear themselves well before their schools or audiences.

Drawing

The purpose of our art study is to consider the principles governing good art, to study and enjoy examples of art embodying these principles, to give an appreciation of harmonious coloring, and to feel the connection existing between the arts, music, literature, and painting, realizing that all are governed by the same general principles. Students should be alive to see and enjoy whatever is beautiful in the world about them, and in their own work to realize that "art is simply doing whatever one has to do in the best possible way."

The class work is grouped under the following heads: Appear-

ance, — perspective elements, pictorial drawing (single objects, grouping and composition). Structure, — elements of form, elements of beauty, structural design. Enrichment, — color, elements of ornament, decorative design.

An abbreviated course in the history of art is carried on, parallel with these subjects, and the pupils are encouraged to collect reproductions of the world's best examples of architecture, ornament, sculpture, and painting.

The pupils use the following mediums of expression: water-color, pencil, charcoal, and blackboard crayon. Blackboard illustrative work from memory along all lines of work studied is an important feature of the course.

Music

Tone perception: listening to voice and piano; scale tones and exercises by imitation; writing from oral dictation.

Tone production: securing softness, sweetness, purity of tone; developing appreciation of beauty of tone; study of child voice.

Sight reading: daily practice in music; thinking, silent, and oral reading.

Analysis of form: developing understanding and appreciation of musical form; most important forms analyzed; illustration by voice and piano; application in appropriate phrasing, etc., in oral work.

Melody: laws illustrated; study of melodies from the symphonies, sonatas, oratorios, operas, and of the best songs; writing of original melodies; study of children's songs, with reference to selection for school use.

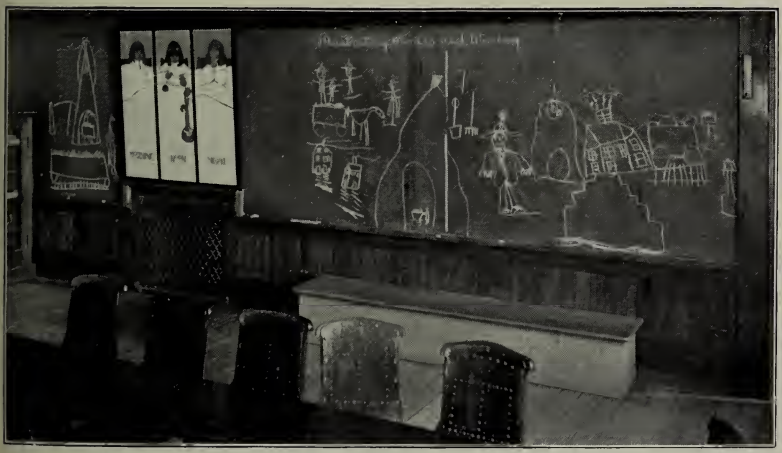
History: lives of eminent composers; illustrations, vocal and instrumental, to gain familiarity with types and cultivate taste for music.

Interpretation: piano playing for pupils once a week in normal school and training school; explanations of graded selections illustrating rhythm, melody, harmony, form, and adaptation to expression of emotion.

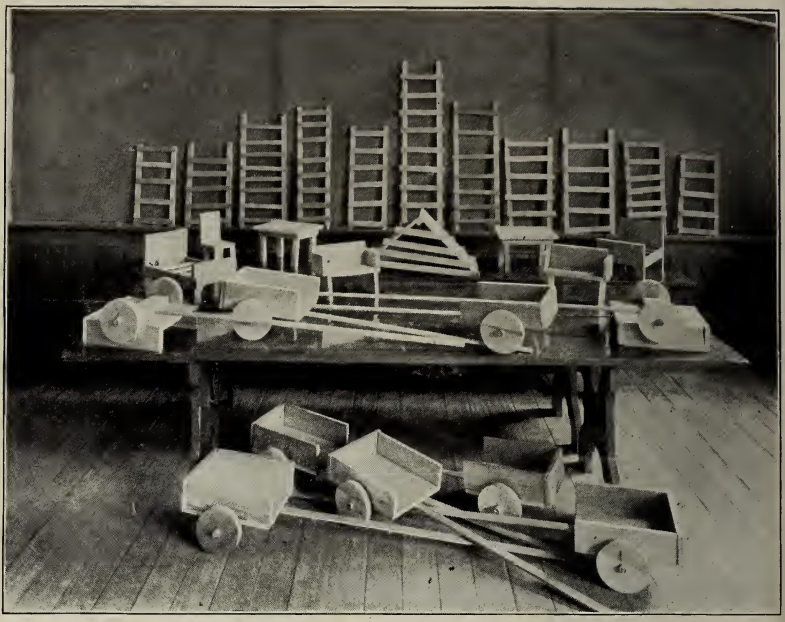
Chorus work: practice twice a week in chorus reading; a musical program given at Christmas and Easter.

Glee club: practice twice a week; two concerts given in the year; singing for pupils in training school.

KINDERGARTEN — COAL MINING



THREE CHILDREN'S DRAWINGS



KINDERGARTEN — WOODWORKING

HARVESTING

Piano music and practice: The collection includes works by eminent composers, graded and progressing in difficulty to Beethoven's sonatas and Bach's fugues. A duplicate collection is in use in the training school, and a smaller collection is in the music room of Taconic Hall. Three pianos are available for students' practice.

Industrial Training

The aims of industrial training are as follows: —

Satisfaction of the impulse to do.

Enjoyment of the product and of merited approval.

Testing of ideas to prove their correctness and worth, to measure presumed ability.

Stimulation of inventiveness.

Understanding by participation in occupations characteristic of the home.

Cultivation of responsibility and conscience.

Comprehension of the meaning and worth of labor.

Recognition of industrial work as applied science and applied art.

Valuation of labor.

Consciousness of personal ambition and ability.

Choice of a vocation.

Pursuance of the processes of a vocation until fitted for independent activity.

Attainment of that attitude toward wisdom which comes from widening personal experience.

Many of these aims remain subconscious elements of understanding and motive, but they are none the less active and powerful. The industrial work for the children and the students is organized to realize these aims, and does so with a high degree of success.

The kinds of work undertaken are modelling in clay; weaving with sticks, paper, threads, and raffia; basketry; cardboard and paper construction; whittling and carpentering; bent iron work; hammering and cutting copper; printing; sewing and embroidery to some extent.

The problems increase in difficulty as the individual gains in ability, the purpose throughout being, so far as circumstances permit, to suit the work to the needs of the individual. Relative diffi-

culty and interest are considered important factors. The normal students follow, as far as time permits, the line of work indicated for the training school, the object of the work not being to prepare teachers of manual training, nor to furnish an adequate course for individuals in whose previous education hand training has not played an important part, but rather to demonstrate the value, and lead students to appreciate the importance, of handwork as an active factor in early education, and to prepare certain pieces of apparatus for teaching purposes.

TRAINING SCHOOL

On an adjacent lot is a modern brick building, containing twenty class rooms, an assembly hall, two large basements, playrooms, a woodworking room for the kindergarten and first primary grades, the motor and boiler rooms. In an annex is the gymnasium, forty by seventy-two feet, supplied with Swedish apparatus sufficient for the accommodation of classes of forty pupils each. All grades are represented, beginning with the kindergarten and extending through nine years of primary and grammar work to the high school. There are eighteen rooms, and in each room is a regular teacher in charge of a class not exceeding forty pupils. The principal is free for the direct observation and instruction of the normal students.

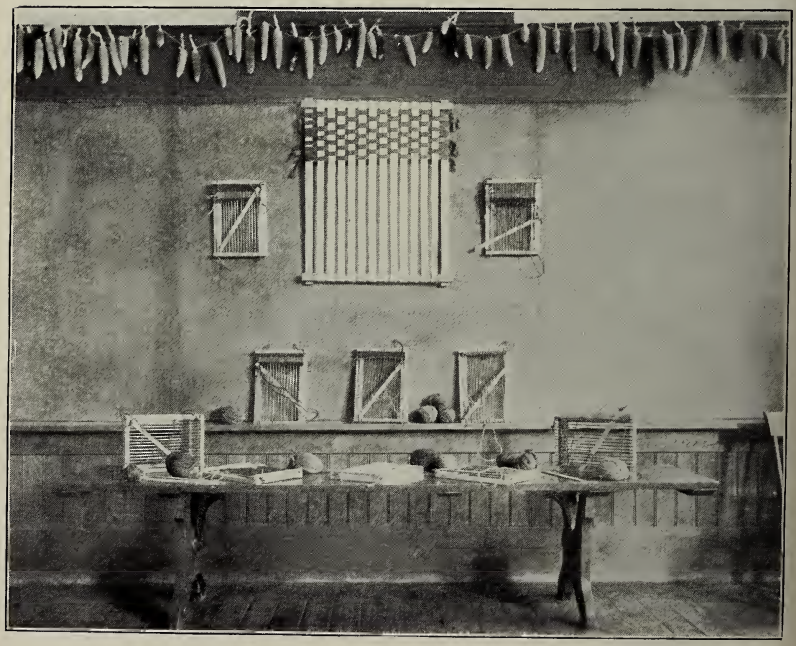
Unusual opportunities are afforded for the study of children and the practice of teaching. Students begin their work in this department immediately upon their entrance into the normal school, and continue it regularly throughout the course. The rapidity of progress through the various stages of the training school work depends on the ability and previous experience of the student. Definite oral instruction and printed schedules guide the observation of children individually, in groups, in classes, and the observation of teaching and control. In general the order of work is as follows: —

First Year — First term: observation of individual children and of groups begun. Second term: observation of the class

GYMNASIUM

TRAINING SCHOOL (MARK HOPKINS SCHOOL)

KINDERGARTEN — PRIMARY COURSES



for prevailing and peculiar qualities; observation of teaching and control emphasized.

Second Year — Third term: study of school organization and management, and assisting in teaching and management. Fourth term: practice in teaching, the amount of responsibility conferred depending on the ability of the student.

Third Year — Responsible charge of classes, elective work. Students who have taught successfully before entering are given opportunities for practice in teaching and disciplining as early in the course as their abilities warrant.

Close and appropriate supervision and instruction are given students by the regular teachers of the several grades and by the principals of the various departments, thus insuring reasonable progress to students requiring extra opportunities in the practice work of teaching.

Equipment

The training school is bountifully supplied with the means of instruction, and the resources of the normal department are always available for daily use. Class libraries are located in each room, thus stimulating pupils to swift and sure lessons in order to get time to read in school, and encouraging them to discriminate as to home reading.

The *kindergarten department* occupies a suite of three sunny rooms which can be opened into one. The equipment is worthy of special mention. Froebel's spirit and principles are followed rather than the letter.

Toys — The collection is large and represents all the industries requiring the use of animals, conveyances, household apparatus, tools, means of production, and other forms of social life. The toys are used in free play before the opening of the session, and in guided play as occurring in the program.

Sand-table — This is an important factor in representing the conditions of industrial life. The work, whether free or guided, is distinctly constructive, collective, and increasingly co-operative,

and affords the sympathy, help, and inspiration which only work with other children can give.

Enlarged material — The building gifts are in three sizes — one inch, one and one-half inches, and two inches. The children because of their greater dexterity and larger products with the enlarged material discarded the one inch material, and that is found of real value in the early primary grades. The one and one-half inch size is used for table work, the two inch material for building on the floor. Similarly, enlarged sticks, tablets, peg boards, and folding paper, etc., are in use.

Weaving — For reasons mentioned above, children do most weaving on large wooden frames, with cloth or worsted. Some very simple work is done with raffia.

Woodworking — In a corner of the basement a small workshop has been established. Small saws, hammers, and screw drivers are used in making ladders, bed frames, carts, tables, coops, etc. Children also stain the articles made.

Gardening — A large plot of ground is arranged in beds, planted, and cared for by the children. Flowers and vegetables are gathered in season and used for satisfying friendship and interpretation of life.

Cooking — The vegetables grown in the garden are cooked in the school-room, corn is popped for food and decoration, maple syrup is boiled to sugar or wax, etc., — and all to give glimpses into the meaning of life and to cultivate the simple, vital virtues.

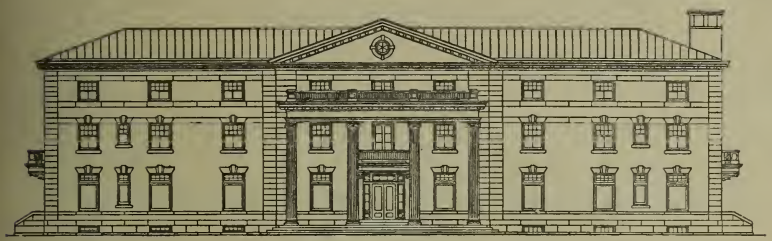
Rhythm — Special effort is made to stimulate the perception and expression of rhythm. Conversation, prose, poetry, music, pictures, and design are all used at appropriate times. Music is chiefly used; the children enjoy it most, respond to it most readily, obeying its changes promptly without aid of words from the leader. Natural movements, such as walking, hopping, running, skipping, jumping, sliding, skating, etc., are performed with their natural rhythm, with and without music, resulting in marked freedom and control of bodily action. Rhythmic games, imitations of children's plays and of animal movements are constantly used in teaching obedience, self-control, co-ordination, and concentration.

TACONIC HALL

SOCIAL ROOM READING ROOM

TACONIC HALL

The material of the dormitory is yellow brick and white marble, thus carrying out the color scheme. The building is 156 feet long and 100 feet wide, the courtyard being about 58x70 feet. On account of the slope of the land the basement floor is at grade with the courtyard, thus securing dry and

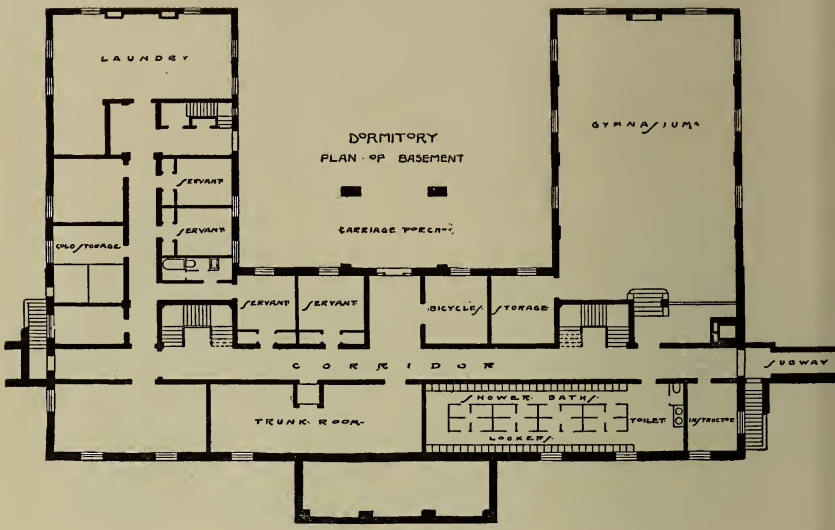


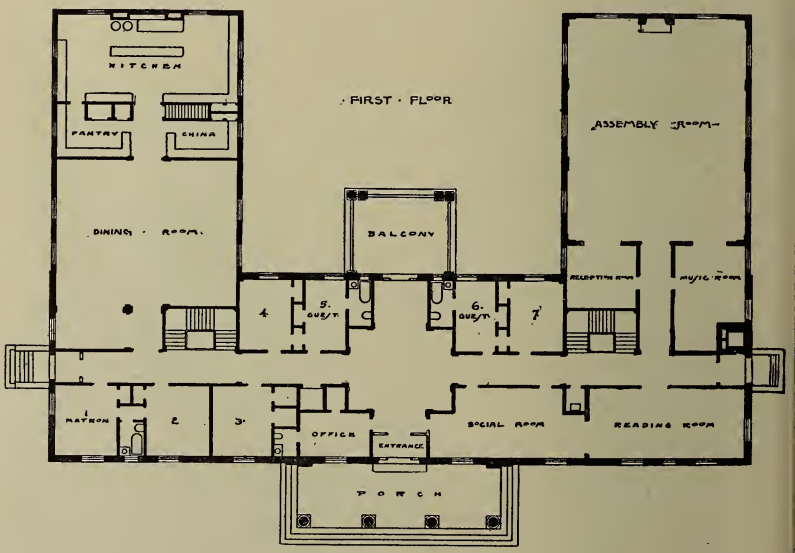
EAST-ELEVATION.

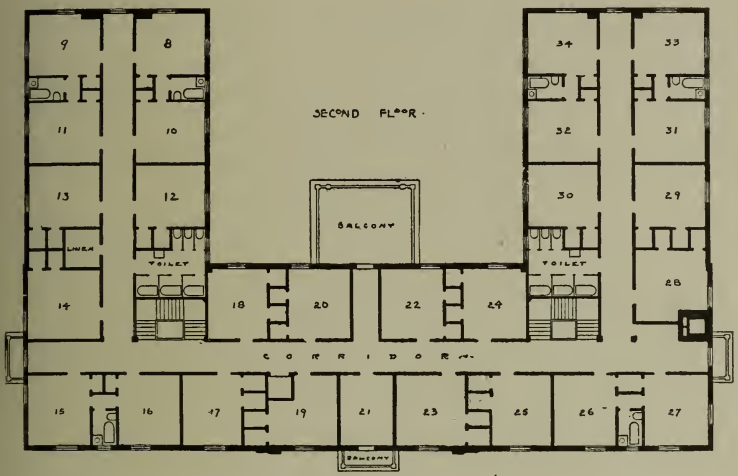
light living rooms and making the wings as seen from the courtyard three stories high. The balcony over the east porch is available for persons living on the third floor, and the two west balconies accommodate those living on the first and second floors. Two guest rooms (5, 6) are provided for parents and friends. Two hospital rooms (41, 43), with suitable furniture and intervening bath room, are on the third floor. The building is heated by steam and lighted by electricity. A subway connects the dormitory and the school building, affording easy access to the gymnasium and protection during inclement weather.

Unusual facilities are provided for cultivating a homelike and beautiful social life. The rooms of the first floor afford opportunities for all forms of mental enjoyment, and the gymnasium in the basement is convenient for daily evening physical play, just before retiring.

Two students occupy one room. Each room is supplied with chairs, study-table, book-case, bureau, commode, screen, two


LAUNDRY
DORMITORY
PLAN OF BASEMENT
GYMNASIUM
SERVANT
SERVANT
CARRIAGE PORCH
CLO/STORAGE
SERVANT
SERVANT
BICYCLE/STORAGE
CORRIDOR
SUBWAY
SHOWER BATH/
TRUNK ROOM
LOCKERS
TOILET
INSTRUCTR


KITCHEN
FIRST FLOOR
ASSEMBLY ROOM
PANTRY
CHINA
DINING ROOM
BALCONY
RECEPTION RM
MUSIC ROOM
4
5. GUEST
6. GUEST
7
MATRON
2
3
OFFICE
ENTRANCE
SOCIAL ROOM
READING ROOM
PORCH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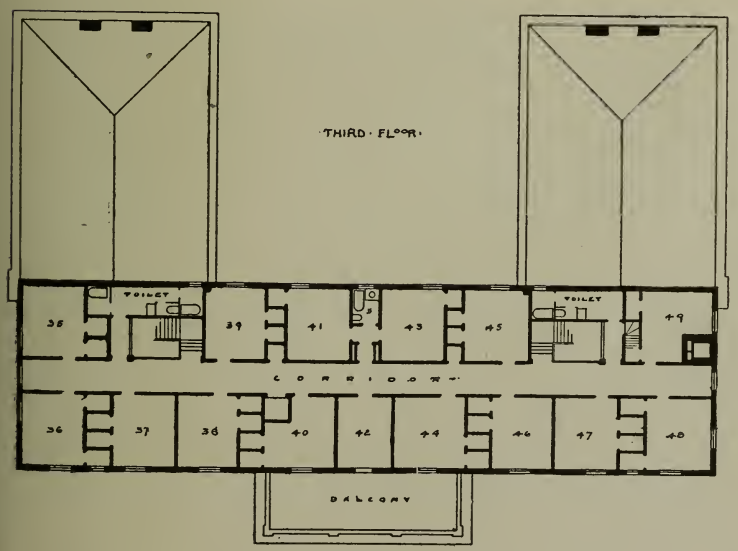
THIRD FLOOR
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couches (three feet wide), mattresses, pillows, coverlets, and rugs. Each boarder brings bedding, towels, napkins, napkin ring, and two clothes bags.

All articles sent to the laundry must be distinctly and indelibly marked with the owner's name. *Initials will not answer.* Trunks also must be marked so as to be easily identified.

Rooms are assigned to entering students according to priority of application, preference being given to residents of Massachusetts.

EXPENSES

Tuition is free to all residents of Massachusetts. "Each pupil from another state than Massachusetts attending a normal school supported by this state shall pay to the principal of the school attended, at the beginning of each half-year session, the sum of twenty-five dollars for the use of the school."

Text-books and supplies are free, as in the public schools.

State Aid, not exceeding one dollar and one-half per week, may be granted to deserving persons after they have been in attendance for at least one term, provided they are residents of Massachusetts, and do not live in towns where the normal schools are situated.

Board — The regulations of the Board of Education require that the boarders shall pay the current expenses, which include table board, heating, lighting, laundry, and service. The price of board in each of the boarding halls connected with the normal schools of the State is $160 for the school year, payable in advance, in four payments, one every ten weeks, beginning with the opening of school in September.

The object of this payment in advance is to secure the purchase of supplies at wholesale cash prices, thereby lessening the cost of supplies and saving to each boarder much more than the interest of the money advanced.

Under these rates boarders are allowed to remain at the hall during the Thanksgiving recess without extra charge. Students whose homes are at a distance may, on permission of the

MUSIC READING RECEPTION

ASSEMBLY HALL

principal, remain at the hall during other vacations, except the long one in the summer, on payment of the additional sums for such vacations. The hall is closed during the summer.

When pupils leave the school before the expiration of a term, money paid in advance will be refunded pro rata. No deduction is made for absence from the hall of less than one week.

If there are vacant rooms, those who wish to room alone may do so, on payment of the additional charge of fifty cents per week.

Employment — Capable and reliable students can reduce their expenses by assisting in the household work, for example, by waiting on table, washing silver and glass, etc. Efficiency, need, and priority of application control the appointments. The amounts thus earned vary from $0.75 to $1.50 per week.

STUDENTS

Senior Class.

Jennie Frances Albert	Pittsfield
Catherine Murphy Barrett	Adams
Bertha Belle Bassett	Greenfield
Maude Bassett	Greenfield
Fannie Emerson Bixby	Holliston
Alice Boyd	North Adams
Agnes Leonore Burns	North Adams
Ethel Mabel Carpenter	North Adams
Ida Rosanna Chapin	Bernardston
Mabel Frances Cowan	Southampton
Eleanor Marie Cowlin	Dalton
Lena Frances Cummings	Cheshire
Estelle Madeline Curley*	Holyoke
Abigail Frances Flaherty	North Adams
Edna Ellen Flaherty	Cheshire
Anna Aloysius Foley	North Adams
Margaret Robina Gallon	North Adams
Alice Adelia Goodnow	Wellesley
Edith Green	North Adams
Anna Lena Gunther	North Adams
Emma Julia Hart†	Pittsfield
Juliette Elmira Hills	Newton
Hope Hotchkiss	Shelburne Falls
Marion Cecilia Hussey	North Adams
Inez Belle Ingraham	Adams
Lucy Belle Kemp	North Adams
Mabel Annie Knox	Chester
Margaret Lillian Lewis	North Adams
Margaret Loretta Lynch*	North Adams
Helena Butler Lyon	Southampton
Louisa Allan McCann	North Adams
Frances Gertrude McLaughlin	Lee
Teresa Wallace Morrissey	Stockbridge
Margaret Evangeline Mullins†	West Stockbridge
Bessie Williams Nichols	Richmond
Mary Loretta Norton	Lee
Geneva Northup Oatman	Pittsfield
Mary Ambrose O'Hern	North Adams

* Graduated November, 1905. † Graduated February, 1906.

Una Sarah Peck	Rowe
Ethel May Plumb	Greenfield
Caroline Grace Preo	North Adams
Bertha Mattie Rice	Conway
Florence Daggett Robinson	North Attleborough
Carrie Evelyn Smith	Buckland
Mabel Hall Thompson	Cheshire
Elizabeth Nelson Venard	North Adams
Christine LaPierre Ward	North Adams
Mary Louise Welch	Holyoke

Senior Kindergarten Class

Eliza Scoville Andrews	Sheffield
Loretta Agnes Boland	North Adams
Jenny Minerva Bushnell	Sheffield
Marion Cady	North Adams
Ellen J. Collins	Lee
Gertrude Glynn Congdon	North Adams
Blanche Maverette Gillette	North Heath
Minnie Sophia Hunter *	Williamstown
Gertrude Rose March	Montague (Turner's Falls)§
Ethel Vera Knight †	Worcester
Grace Emaline Thickins	Pittsfield

Junior Class

Celia Anna Andrew	North Adams
Gertrude Johanna Arnold	Holyoke
Alice Gilmore Barrett	Adams
Aimée Maynard Blanchard	North Adams
Frances Judd Brainerd	Monson
Frances Barr Buntin	Pittsfield
Mabelle Narrilla Chadwick	Adams
Harriet Statyra Crafts	Ashfield
Marion Alice Crafts	Ashfield
Caroline Lillian Cushman	Pittsfield
Alice Bertha Dalton	North Adams
Elizabeth Cecilia Feeley ‡	Lenox
Rosa Belle Hall	Buckland
Ruby Marion Hemenway	Leverett (North Leverett)
Mildred Hines	Berkshire
Catherine Margaret Kelly	Lenox
Katharyn Alice Mosher	North Adams
Florence Eleanor Nash	Greenfield
Blanche Minnie Newman	Florida (Hoosac Tunnel)
Lurane Packard	Goshen
Florence Maria Reed	North Adams
Margaret Annie Tumpane	Adams
Edna Frances Wood	Adams

* Graduated November, 1905. † Graduated February, 1906. ‡ Entered February, 1906.
§ Post-offices are in parentheses.

Junior Kindergarten Class

Grace Marion Margaret Beaton	East Rochester (West Wareham)
Kathryn Marguerite Bliss	Hinsdale
Adella May Endress	Bennington, Vt.
Clara Irene Parkhurst	North Adams
Lottie Evangeline Stetson	Jacksonville, Vt.
Susie Belle Temple	North Adams

Special Students

Mary Boyd (Smith College)	North Adams
Sadie Hammond Goddard	Montague
Grace Agnes MacDougall (Smith College)	North Adams
Emily Louise Parsons	Westhampton
Annie Davis Pike (Mt. Holyoke College)	North Adams
Minnie Josophine Stockwell	Athol
Maia Robinson Sykes (Wellesley College)	North Adams
Helen Urquhart	Ashfield

Vacation Students

Elizabeth Callahan	Charlestown, N. H.
Edith Ginns	Gloucester
Nina Marion Kingsley	Monroe (Monroe Bridge)
Edith Jennie Nelson	Becket (Chester)
Eva Lilian Peck	Rowe
Nellie Gertrude Pomeroy	Hubbardston
Annie May Porter	Charlemont
Ruth Caroline Snow	Lanesborough
Eva L. Torrey	Williamstown
Frances Elizabeth VanDeusen (Westfield Normal School)	Dalton

Summary

Kindergarten course		17
Senior class	11	
Junior class	6	
Regular course		76
Senior class	48	
Junior class	23	
Special course	5	
Vacation students		13
Normal graduates	1	
Other teachers	12	
Total		106

Certificate Required for Admission to a Preliminary Examination.

_____ 1906.

_____ has been a pupil in the

_____ School for three years, and is, in my judgment, prepared to pass the normal school preliminary examination in the following group, or groups, of subjects and the divisions thereof: —

Group II. _____ Group IV. _____

Group III. _____ Group V. _____

Signature of principal or teacher, _____

Address, _____

Certificate of Graduation and Good Character.

This is to Certify that M_____

is a regular graduate of a four years' course of the _____

_____ High School, and that, to the best of my knowledge and belief, _____ he is a person of good moral character.

_____ *Principal.*

_____ 1906.

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NORTH ADAMS NORMAL SCHOOL

CIRCULAR AND CATALOG

NINETEEN HUNDRED AND SEVEN

UNIVERSITY OF ILLINOIS L
AUG 2 8 1916

Straight mine eye hath caught new pleasures
Whilst the landscape round it measures:
Russet lawns and fallows grey,
Where the nibbling flocks do stray;
Mountains on whose barren breast
The labouring clouds do often rest;
Meadows trim with daisies pied,
Shallow brooks and rivers wide;
Flowers and battlements it sees
Bosomed high in tufted trees,—
Where perhaps some beauty lies,
The cynosure of neighbouring eyes.

MILTON.

The thunder and lightning, storm and cloud, as well as the soft beauty of colour, and the harmony of mountain outline, have been a part, and a very important part, of their training. * * On these heights such men seemed to have gained something of the strength of Him who dwells in the heavens far above their highest peaks,—"the strength of the hills," which, as the Hebrew poet says, "is His also."

HUTCHINSON, in The Story of the Hills.

STATE NORMAL SCHOOL

AT

NORTH ADAMS, MASS.

Established June, 1894

CIRCULAR AND CATALOG

For Year ending June 30, 1907

BOSTON
WRIGHT & POTTER PRINTING CO., STATE PRINTERS
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1907

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The State Board of Publication.

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Established 1837

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His Honor EBEN S. DRAPER, Lieutenant-Governor

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ELVA L. BROWNSON

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* On leave of absence.

CALENDAR

1907

Graduation

Tuesday, June 25, 10 A.M.

First Entrance Examination

Thursday and Friday, June 27 and 28, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 10 and 11, at 9 A.M.

School Year Begins

Training School, Monday, September 9.

Normal School, Thursday, September 12, at 9 A.M.

Thanksgiving Recess

Begins Tuesday night, November 26. Ends Monday night, December 2.

Christmas Recess

Begins Wednesday night, December 18. Ends Monday night, December 30.

1908

Second Term Begins

Monday, February 3.

Spring Recess

Begins Friday night, April 10. Ends Monday night, April 20.

Graduation

Tuesday, June 23, 10 A.M.

First Entrance Examination

Thursday and Friday, June 25 and 26, at 9 A.M.

Second Entrance Examination

Tuesday and Wednesday, September 8 and 9, at 9 A.M.

School Year Begins

Training School, Monday, September 7.

Normal School, Thursday, September 10, at 9 A.M.

Thanksgiving Recess

Begins Tuesday night, November 24. Ends Monday night, November 30.

Christmas Recess

Begins Wednesday night, December 16. Ends Monday night, December 28.

Sessions are from 9 A.M. to 12 M., and 1.30 P.M. to 4 P.M. Saturday sessions are omitted.

Entrance examinations on the dates given above begin at 9 o'clock A.M., in the assembly hall. Candidates are to be present at the opening and on both days. They should come prepared to stay in September, as the term begins on the following day.

For information about the school address the principal at North Adams.

State Normal School
AT NORTH ADAMS, MASS.

LOCATION

North Adams is distinctly picturesque. The elevations that surround the city are among the most attractive of the Berkshire Hills. On the north side are rounded domes of the Green Mountains, on the east the abrupt wall of Hoosac Mountain overhangs the city, while on the south-west border rise the outlines of massive Greylock, the highest peak in Massachusetts.

On the westerly slope of an eminence rising several hundred feet above the river are situated the school buildings. Of the many beautiful locations in Berkshire County, the one chosen is remarkably fine. The near rounded domes, the deep retreating valleys, the winding streams, with all their changing life and aspects, always please and inspire. The noisy hum of the city slightly removed, the beauties of nature close at hand, the duties of student life are made easy and profitable to an unusual degree. The city of North Adams was both wise and generous in its gift of a location. Especially noteworthy are the facilities for out-door study of nature and of industry.

The city is easily reached from the east and west by the Fitchburg Railroad, from the south by the Boston & Albany road. Electric cars connect the city with Williamstown, Adams, and other towns to the south.

BUILDINGS

The school building, the dormitory, and the principal's house in exterior are of yellow brick and white marble, with metal roofs. The school building, in Italian style, is one hundred and fifty-two feet long, eighty-four feet deep, and three stories

and basement in height. It is of slow-burning construction, the floor timbering and roof being carried with steel beams and trusses. The arrangement of stairways, which are iron, gives easy and safe egress.

In the basement are the boiler, engine, fuel, heating, and repair rooms, a room for manual training, and a photographic dark room; in the first story, reception and lunch rooms, cloak, coat, and toilet rooms, and four natural science laboratories; in the second story, the assembly hall, office, libraries, and class rooms for the languages and mathematics; in the third story, the physical and chemical laboratories, the art rooms, and a general class room; and in the attic is ample space for storage.

The interior is finished in oak throughout and provided with modern improvements and facilities. Cabinets, drawers, closets, specially adapted to the needs of the school, are provided in all the rooms. In strength, simplicity, beauty, and adaptation to its use the school building is not surpassed.

REQUIREMENTS FOR ADMISSION

Candidates for admission to any one of the normal schools must, if young women, have attained the age of sixteen years, and if young men, the age of seventeen years. Their fitness for admission will be determined: —

1 By their standing in a physical examination.
2 By their moral character.
3 By their high school record.
4 By a written examination.
5 By an oral examination.

Physical Examination

The State Board of Education adopted the following vote March 7, 1901: —

That the visitors of the several normal schools be authorized and directed to provide for a physical examination of candidates for admission to the normal schools, in order to determine whether

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are on the certificate list of the New
England Colleges Entrance Examination
Board may be admitted to any of the State
Normal Schools without examination in any
subject required for admission in which
they have attained a standard of 2, or 80
per cent., as certified by the principal
of the school.

Beginning with 1905, candidates from
high schools not in the college certifi-
cate list may be admitted on similar con-
ditions if the high schools are approved
for the purpose by the Board of Education.
High schools desiring this approval
should correspond with the Secretary of
the Board.

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they are free from any disease or infirmity which would unfit them for the office of teacher, and also to examine any student at any time in the course, to determine whether his physical condition is such as to warrant his continuance in the school.

Moral Character

Candidates must present certificates of good moral character. In deciding whether they shall prepare themselves to become teachers, candidates should note that the vocation requires more than mere freedom from disqualifying defects; it demands virtues of a positive sort that shall make their impress for good upon those who are taught.

High School Record

It may be said, in general, that if the ordinary work of a good statutory high school is well done, candidates should have no difficulty in meeting the academic tests to which they may be subjected. *They cannot be too earnestly urged, however, to avail themselves of the best high school facilities attainable in a four years' course, even though they should pursue studies to an extent not insisted on, or take studies not prescribed, in the admission requirements.*

The importance of a good record in the high school cannot be overestimated. *Principals are requested to furnish the normal schools with records of the high school standing of candidates.* The stronger the evidence of character, scholarship, and promise, of whatever kind, candidates bring, especially from schools of high reputation and from teachers of good judgment and fearless expression, the greater confidence they may have in guarding themselves against the contingencies of an examination and of satisfying the examiners as to their fitness.

Written Examination

The examinations will embrace papers on the following groups of subjects, a single paper with a maximum time allowance of two hours to cover each of groups I, II, and IV,

and a single paper with a maximum time allowance of one hour to cover each of groups III and V (*five papers with a maximum time allowance of eight hours*): —

I *Language* — (*a*) English, with its grammar and literature, and (*b*) either Latin or French.

II *Mathematics* — (*a*) The elements of algebra and (*b*) the elements of plane geometry.

III *United States History* — The history and civil government of Massachusetts and the United States, with related geography and so much of English history as is directly contributory to a knowledge of United States history.

IV *Science* — (*a*) Physiology and hygiene and (*b* and *c*) any two of the following: physics, chemistry, physical geography, and botany, provided one of the two selected is either physics or chemistry.

V *Drawing and Music* — (*a*) Elementary, mechanical and free-hand drawing, with any one of the topics, — form, color, and arrangement, and (*b*) music.

Oral Examination

Each candidate will be required to read aloud in the presence of the examiners. He will also be questioned orally either upon some of the foregoing subjects or upon other matters within his experience, in order that the examiners may gain some impression about his personal characteristics and his use of language, as well as give him an opportunity to furnish any evidences of qualification that might not otherwise become known to them.

General Requirement in English for All Examinations

No candidates will be accepted whose written English is notably deficient in clear and accurate expression, spelling, punctuation, idiom, or division of paragraphs, or whose spoken English exhibits faults so serious as to make it inexpedient for the normal school to attempt their correction. The candi-

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date's English, therefore, in all oral and written examinations will be subject to the requirements implied in the statement here made, and marked accordingly.

Special Directions for the Written Examinations

I Language

(*a*) *English* — The subjects for the examination in English will be the same as those agreed upon by the colleges and high technical schools of New England and now quite generally adopted throughout the United States.

1 *Reading and Practice* — A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter and spirit of the books, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of a few topics to be chosen by the candidate from a considerable number set before him in the examination paper. In place of a part or the whole of this test, the candidate may present an exercise book, *properly certified by his instructor,* containing compositions or other written work done in connection with the reading of the books.

The books set for this part of the examination are: —

1906–1908 — Shakespeare's *Macbeth* and *The Merchant of Venice; The Sir Roger de Coverley Papers* in *The Spectator;* Irving's *Life of Goldsmith;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe* and *The Lady of the Lake;* Tennyson's *Gareth and Lynette, Lancelot and Elaine,* and *The Passing of Arthur;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

2 *Study and Practice* — This part of the examination pre-supposes a more careful study of each of the works named below. The examination will be upon subject-matter, form, and structure.

In addition, the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong. The books set for this part of the examination will be: —

1906–1908 — Shakespeare's *Julius Cæsar;* Milton's *L'Allegro,*

Il Penseroso, Comus, and *Lycidas;* Burke's *Speech on Conciliation with America;* Macaulay's *Essay on Addison* and *Life of Johnson.*

(*b*) *Either Latin or French* — The translation at sight of simple prose or verse, with questions on the usual forms and ordinary constructions, and the writing of simple prose based in part or in full on the passage selected.

The Conference on Uniform Requirements in English for Admission to College, on whose recommendations the foregoing lists of books in English and directions for study are based, advises —

1 That English be studied throughout the primary and secondary school courses, and, when possible, for at least three periods a week during the four years of the high school course.

2 That the prescribed books be regarded as a basis for such wider courses of English study as the schools may arrange for themselves.

3 That, where careful instruction in idiomatic English translation is not given, supplementary work to secure an equivalent training in diction and in sentence structure be offered throughout the high school course.

4 That a certain amount of outside reading, chiefly of poetry, fiction, biography, and history, be encouraged throughout the entire school course.

5 That definite instruction be given in the choice of words, in the structure of sentences and of paragraphs, and in the simple forms of narration, description, exposition, and argument. Such instruction should begin early in the high school course.

6 That systematic training in speaking and writing English be given throughout the entire school course. That, in the high school, subjects for compositions be taken partly from the prescribed books and partly from the students' own thought and experience.

7 That each of the books prescribed for study be taught with reference to (*a*) the language, including the meaning of the words and sentences, the important qualities of style, and the important allusions; (*b*) the plan of work, *i.e.,* its structure and method; and (*c*) the place of the work in literary history, the circumstances of its production, and the life of its author. That all details be studied, not as ends in themselves, but as means to a comprehension of the whole.

II Mathematics

(*a*) The elements of algebra through affected quadratic equations.

(*b*) The elements of plane geometry.

While there is no formal examination in arithmetic, the importance of a practical working acquaintance with its principles and processes cannot be too strongly emphasized. The candidate's proficiency in this subject will be incidentally tested in its applications to other subjects.

In geometry, the candidate's preparatory study should include independent solutions and demonstrations, — work that shall throw him upon his own resources; and his ability to do such work will be tested in the examination. An acquaintance with typical solid forms is also important, — enough, at least, to enable the candidate to name and define them and to recognize the relations borne to them by the lines, planes, angles, and figures of plane geometry.

III United States History

Any school text-book on United States history will enable candidates to meet this requirement, provided they study enough of geography to illumine the history, and make themselves familiar with the grander features of government in Massachusetts and the United States. Collateral reading in United States history is strongly advised; also in English history, so far as this history bears conspicuously on that of the United States.

IV Science

(*a*) *Physiology and Hygiene* — The chief elementary facts of anatomy, the general functions of the various organs, the more obvious rules of health, and the more striking effects of alcoholic drinks, narcotics, and stimulants upon those addicted to their use.

(*b* and *c*) *Any Two of the Following Sciences, — Physics, Chemistry, Botany, Physical Geography, provided One of the Two is either Physics or Chemistry* — The chief elementary facts of the subject selected, so far as they may be presented in the courses usually devoted to them in good high schools. It will be a distinct advantage to the candidate if his preparation includes a certain amount of individual laboratory work.

A laboratory notebook, with the teacher's endorsement that it

is a true record of the candidate's work, will be accepted as partial evidence of attainments in the science with which it deals. The original record should be so well kept as to make copying unnecessary.

V Drawing and Music

(*a*) *Drawing* — Mechanical and free-hand drawing, — enough to enable the candidate to draw a simple object, like a box or a pyramid or a cylinder, with plan and elevation to scale, and to make a free-hand sketch of the same in perspective. Also any one of the three topics, — form, color, and arrangement.

(*b*) *Music* — Such elementary facts as an instructor should know in teaching singing in the schools, including major and minor keys, simple two, three, four, and six part measures, the fractional divisions of the pulse or beat, the chromatic scale, the right use of the foregoing elements in practice, and the translation into musical notation of simple melodies or of time phrases sung or played.

Importance of Adequate Preparation

Candidates should measure their duty of making adequate preparation not wholly by the subjects selected and the papers set for the admission examinations, but by the larger demands their chosen vocation is sure to make upon them. The more generous and thorough, therefore, the preparation of the candidate, the greater the likelihood of profiting by the normal school, of completing the elementary course on time, of securing employment after graduation, and of doing creditable work as a teacher.

The candidate is advised, therefore, to utilize all feasible opportunities offered by the regular high school course for promoting this breadth of preparation, and the high school should aim to hold the candidate up to the higher ideals of such preparation.

Equivalents

Reasonable allowance in equivalents will be made in case a candidate, for satisfactory reasons, has not taken a study named for examination. Successful experience in teaching will be taken into account in the determination of equivalents.

Division of the Examinations

Candidates may be admitted to preliminary examinations a year in advance of their final examinations, provided they offer themselves in one or more of the following groups, each group to be presented in full: —

II Mathematics
III United States History
IV Science
V Drawing and Music

Preliminary examinations can be taken in June only.

Every candidate for a preliminary examination must present a certificate of preparation in the group or groups chosen, or in the subjects thereof, the form of certificate to be substantially as follows: —

.....has been a pupil in the

.....School for.....years, and is, in my judgment, prepared to pass the normal school preliminary examination in the following group or groups of subjects and the divisions thereof: —

.....

.....

Signature of principal or teacher,.....

Address,.....

The group known as I Language must be reserved for the final examinations. It will doubtless be found generally advisable in practice that the group known as IV Science should also be so reserved.

While division of the final or complete examinations between June and September is permissible, it is important both for the normal school and for the candidate that the work laid out for the September examinations, which so closely precede the

opening of the normal schools, shall be kept down to a minimum. Candidates for the final or complete examinations are earnestly advised, therefore, to present themselves in June.

TIMES OF EXAMINATION AND ADMISSION

Examinations for admission to the normal school are held at the close of the school year in June, and also at the beginning of the school year in September, as stated in the calendar. Candidates are advised to present themselves at the first examination.

New classes are admitted to the normal schools at the beginning of the fall term. Candidates should come in September prepared to stay, as regular work begins on the day following the examinations. In exceptional cases admissions to classes already formed are allowed at the beginning of the second term.

COURSES

Elementary Course

The elementary course of study is designed primarily for those who aim to teach in the public schools below the high school grade. It comprises substantially the following subjects: —

I The study of the educational values of the following subjects and of the principles and methods of teaching them: —

(*a*) *English,* — reading, oral and written composition, grammar, rhetoric, English and American literature.

(*b*) Mathematics, — arithmetic and bookkeeping, algebra, plane geometry.

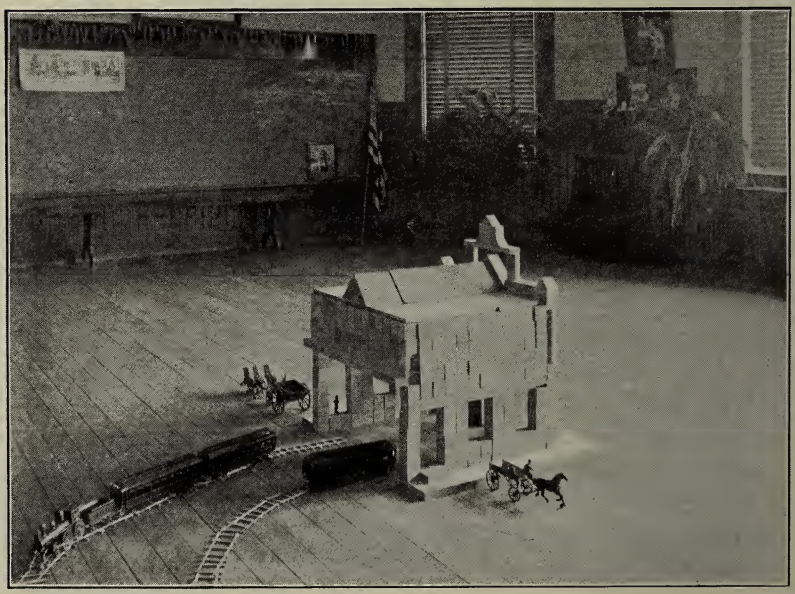
(*c*) History, — history and civil polity of the United States and of Massachusetts.

(*d*) Science, — physics, chemistry, mineralogy, botany, zoölogy, geography, physiology and hygiene.

(*e*) Drawing, vocal music, physical training, manual training.

II (*a*) The study of man, body and mind, for the prin-

KINDERGARTEN — GROUP WORK



ciples of education; the study of the application of these principles in school organization, school government, and in the art of teaching; the history of education; the school laws of Massachusetts.

(*b*) Observation and practice.

The time required for the completion of this course depends upon the students. It may not exceed two years for those of satisfactory preparation and superior ability; for others, three years are needed to do the work properly. In many cases more than two years are insisted upon. A diploma is given when the course is satisfactorily completed.

A Third Year for Practice and Study

The board of visitors and the principal of any normal school may arrange for its students a third year of study and of practice in teaching whenever, in their judgment, such action is desirable. The object is a more complete mastery of the topics arranged for the regular two years' course, as well as further experience in teaching.

For students signifying at their admission their intention of pursuing a three years' course, it will be arranged so that elective subjects may be begun early in the course, instead of being postponed to the third year.

The Kindergarten Primary Course

The principles which control kindergarten instruction apply not alone to children of three or four years but as well to the whole phase of early childhood, the period extending from two or three to seven or eight years of age. Kindergarten and primary instruction differentiate not in principle, not in general method, but in adaptation of ways and means to the tendencies and growing powers prominent at that period. The process is continuous, the objects studied vary, constructive power widens in application, the use of symbols becomes increasingly prominent. The course as planned and practised

trains teachers to work in the kindergarten with due regard to succeeding years of growth of children, and in the primary grade with due regard to previous training and later growth. For such teachers the demand far exceeds the supply.

The kindergarten primary course is a modification of the elementary course (see page 16) and requires two years at least for completion. The greater portion of the practice teaching may be done in the primary or kindergarten grades as the student may choose.

To enable students to become competent principals of kindergartens a third year of advanced kindergarten study and responsible control has been arranged. Different children attend the afternoon kindergarten and their instruction is given into the charge of graduate students of ability, under the general supervision of the principal of the department. Similar facilities are afforded for study and practice in the first grade primaries. Graduate students of marked ability are paid a small salary, sufficient to pay living expenses, during the third year. A special diploma is given to students completing satisfactorily the graduate course.

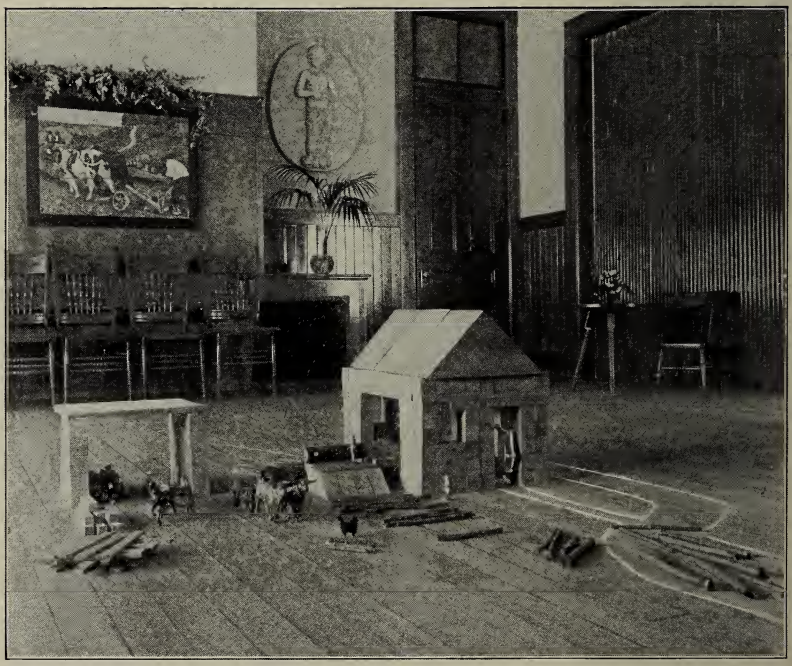
The conditions of admission are the same as for the elementary course. In addition, there should be some facility in playing the piano and singing, if the better positions are to be secured. Students pay the cost of material taken away, but this expense does not exceed ten dollars for the course.

For further details see page 41.

Special Courses for Teachers

Teachers of several years of successful experience in teaching, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal and of the board of visitors, select a course (including the course in psychology and pedagogy), and when such course is successfully completed they shall receive certificates for the same. Candidates are admitted to this course without written examination.

KINDERGARTEN — LUMBERING



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EQUIPMENT

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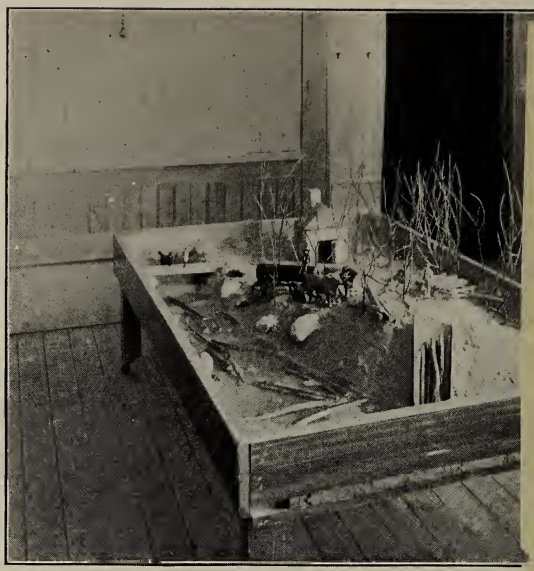
College graduates may be admitted to the State Normal Schools without examination, and may receive a diploma after satisfactorily completing a course of one year, requiring at least twenty recitation periods per week and including the advanced pedagogy and practice of the senior year.



KINDERGARTEN — LUMBERI

THE SAW MILL

Teachers desirous of spending their vacations at the school are cordially invited to come at any time. Observation work, study of elected subjects, or participation in regular course work and preparation of teaching material, are offered in all departments of the normal and training school. There will be afforded every facility for study, the work being adapted to the wishes and capabilities of applicants, in so far as the permanent needs of the school permit. For subjects see page 24.

Special Course for College Graduates

Graduates of colleges and universities, who give evidence of maturity, good scholarship, and of aptness to teach, may, with the consent of the principal of the school and of the board of visitors, select from the above curriculum of study a course which may be completed in one year, and when such course is successfully completed they shall receive a certificate for the same. Candidates are admitted to this course without written examination.

EQUIPMENT

The four natural science laboratories are arranged in sequence, and by means of specimens and models in well-lighted wall cases is displayed the progression of mineral, plant, and animal life to its final development in man. Banks of drawers are provided in the laboratories for collections of the varieties of each type displayed in the wall cases. At the table are drawers for the working collections and tools distributed to students. In the instructors' laboratories are reserve specimens, models, pictures, charts, and diagrams.

Worthy of special mention are the following materials for study: —

The synoptic and Howell's college collection of minerals and rocks in the mineralogical and geological laboratory.

In the biological laboratories are the Deyrolle plant models, illustrating twelve of the leading families; the synoptical collec-

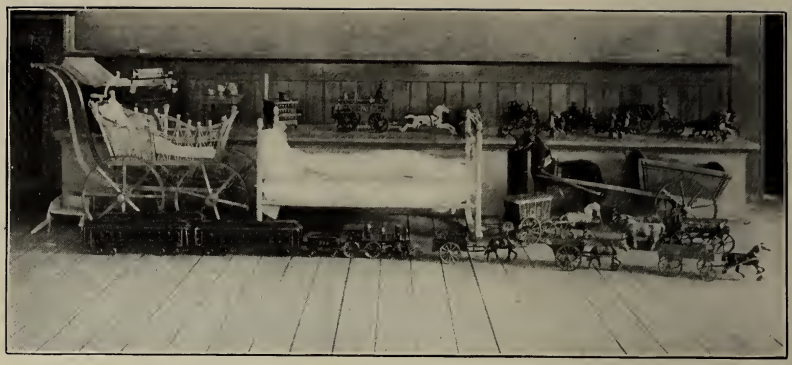
tion of invertebrates and vertebrates; the preparations (wet and dry) showing the habits, homes, and metamorphoses of many insects, the development of a snail, a leech, a crayfish, a horseshoe crab, a spider, a fish, a salamander, a frog, a toad, a snake, and a lizard, displaying all stages of growth, from the egg to the adult form; dissected specimens of a clam, a crayfish, a lobster, a fish, a frog, a lizard, a turtle, a dove, and a rat, displaying separately the digestive, circulatory, and nervous systems; aquaria and cages; a series of skeletons, a human skeleton, a life-size manikin, a set of Auzoux models (eye, ear, larynx, brain, pelvis), and preserved vital organs.

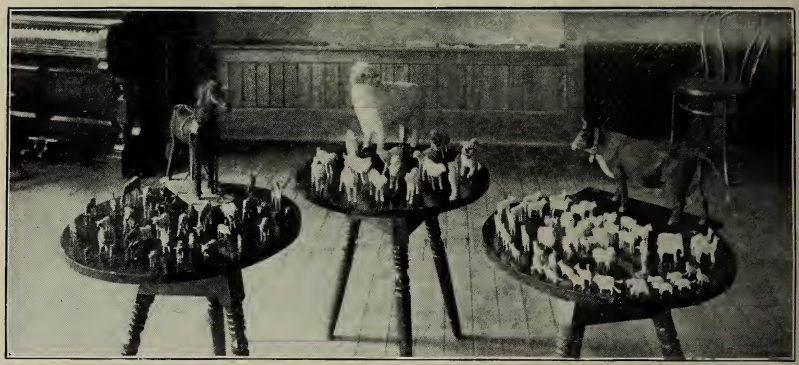
In the geographical laboratories are several thousand carefully selected, mounted, and classified pictures, including photographs, engravings, half-tones, bromide enlargements, the Hölzel series of oleographs, and several hundred lantern slides. The models include the Jones eighteen-inch relief globe, Howell's (sixteen feet radius) model of the United States, and a large model of southern New England, the Harvard series of physiographic models. Slated spheres, large and small globes are provided for class and individual use. Three sand-tables, each ten feet by four feet, afford abundant opportunities for sand modelling.

The collection of maps includes two maps of Switzerland, one beautifully shaded to show reliefs and drainage, and the other to show the same physical features combined with political and industrial features; two similar maps of Alpenland; Habenicht-Sydow physical series; Johnston political series; a series of thirty world maps, showing physical, productive, and political features; coast survey charts; topographic maps and folios; a series of maps of Massachusetts, showing relief, drainage, cities, railways, counties, etc.; similar maps of Rhode Island and New Hampshire; a series of maps for study of map symbols; pamphlets, railway folders, magazines, etc., for commercial geography.

The mathematical department is supplied with collections of models for individual use and class observation in the study of geometry, arithmetic, and algebra in their appropriate development through all grades, including those of the high school.

The historical and literary departments are supplied with several hundred classified pictures and numerous charts.





The art departments are equipped with adjustable tables, models, type, and ornamental forms, pictures, drawings, and casts, illustrative of the phases of modern art teaching.

The library has been selected with especial reference to the needs of teachers. Department libraries are proportionately represented, and furnish excellent opportunities for general reference work and special investigation. Magazines and pamphlets for general culture and departmental study are numerous, the pamphlet division already including several thousand copies.

The three laboratories for physics and chemistry are equipped with modern improvements, and with apparatus for individual experimentation in both qualitative and quantitative work.

The manual training room is furnished with twenty-five sloyd benches and tools for working in clay and wood.

The gymnasium is located in the dormitory and is equipped with the apparatus for the practice of Swedish gymnastics and a system of shower baths. See page 44.

An electric projection lantern and numerous slides have been provided. The lantern can be used in six different rooms, and supplements the work in the various sciences, in literature, and in art.

DESIGN OF THE NORMAL SCHOOL

"The design of the normal school is strictly professional; that is, to prepare in the best possible manner the pupils for the work of organizing, governing, and teaching the public schools of the Commonwealth" (Board of Education, May 6, 1880).

The work of each department is to secure these ends: —

Pupils — The leading motive and continuous effort are to change the pupil's point of view from that of the student to that of the teacher, to inspire him with the spirit of the true teacher, to train him to the noblest ideals and best habits of personality, thinking, and teaching.

Children — The pupil is placed from the beginning of his course in close contact with children, that through them there may be revealed to him such understanding of child life in

general and appreciation of the individual children as will impress upon his mind the necessity of their interests being his chief concern. That schools should be organized to satisfy the needs of children, that school management is the process of securing self-control by the children, that children should be taught, rather than subjects, are truths which are presented as of fundamental importance.

Subjects — The thought of the pupil is carefully directed to the subjects of a public school course. Each subject is analyzed to find its content, its natural or logical order, its teaching order. The appropriate sources of knowledge are found, the prominent processes of acquisition are emphasized, and corresponding forms of expression exemplified. The knowledge, disciplinary and cultural values of each subject are discussed. Stress is laid upon accuracy of knowledge and the use of each subject as a *means* and not an end in education. Natural and helpful correlations of subjects are made, and the place of each in a course of study indicated.

Teaching — The process of learning is distinguished from the process of teaching, the pupil being led to perceive most definitely that in learning the student concentrates his thought upon the object, that in teaching the teacher concentrates his thought upon the student's mental process of learning. Pupils are led to discover by personal observation that the teaching process consists of two parts, namely, preparatory thought (*i.e.,* lesson planning) and consequent instruction (*i.e.,* teaching). Lesson plans are derived by the pupils from observed teaching and the study of typical plans, and are found to include consideration of (1) aims, that is, needs of the children to be satisfied; (2) right mental activity of the child; (3) appropriate sources of knowledge and interest. Lesson teaching is perceived to be (1) skillful use of sources of knowledge and interest, (2) which use stimulates right activity in each child, (3) and enables him to satisfy his needs. Pupils, by practice

in writing lesson plans and in teaching children in accordance with the plans, become certain that intimate knowledge of children and thorough lesson planning are, together with the personality of the teacher, the vital conditions for successful teaching; that lesson plans may free the teacher of the burden of the subject, and enable him to attend discreetly and heartily to the needs and interests of the children. Similarly, the place and purpose of recitations, drills, examinations, and criticism are brought before the pupils for consideration and judgment.

Organization — The principles underlying the organization of a school are arrived at by the pupils by direct study of the training school and other schools they have experienced, by consideration of children's needs as individuals and as members of society, and by use of the experience of teachers and other educational authorities.

Government — Pupils are led, by review of their own experiences in conforming, obeying, and controlling, by the testimony of others, by their knowledge of children, by their efforts in the training school, and by their study of psychology, to understand the relations between knowing, feeling, and doing, to value and use the instinctive reactions, and to attempt to form habits in themselves and children of right self-activity for the sake of self-development and service to others.

The school laws of the State receive due and appropriate study, in connection with the consideration of organization, government, and the history of education.

Order of Studies in the Elementary Course

Junior Class		Senior Class	
First Term	Second Term	Third Term	Fourth Term
Drawing 3	Drawing 3	Drawing 3	-
Music 4	Reading 3	Grammar 3	Reading 3
Gymnastics 2	Gymnastics 2	Gymnastics 2	Gymnastics 2
Manual training 2	-	-	-
Language 1	-	Literature 3	Literature 3
Chemistry 3	Physics 4	Geography 4	Geography (half term) 5
Mineralogy 2	Botany 2	Zoölogy 2	History of education, school laws (half term) 5
Physiology 3	-	History 4	
Geometry 4	Algebra 4	-	Psychology and pedagogy 5
Penmanship	Arithmetic 4	-	-
Child study: — 4 Individuals Groups	Observation of teaching and control. Assisting 4	School organization 1 Teaching at training school 4	School management 1 Teaching and control (half term) 10
Kindergarten course omits chemistry and part of geometry	Kindergarten course omits algebra	Kindergarten course omits drawing, history and zoölogy	Kindergarten course omits geography and literature

Note — Figures indicate the number of periods per week.

THE RANGE OF THE SUBJECTS

The professional work is indicated in general on pages 21–23, under the topic, "Design of the Normal School," but applies in detail to each of the subjects analyzed and described as follows. Accuracy and fulness of scholarship are strenuously emphasized.

Psychology and Pedagogy

The study of children is continuous throughout the whole course. Individual children are carefully observed to ascertain individual physical, mental, and moral aptitudes and defects, in order that each child's needs may be satisfied. Groups of children — the healthy and the sick, the able and the weak, the bright and the dull, the tidy and the slovenly, the leaders and the followers, the good and the bad, etc. — are found, and their relative numbers

and importance estimated, that justice may be done to all. Based on these and similar observations made elsewhere are the students' conclusions as to native reactions, behavior, self-control, and tact.

In their study of individual subjects of the course, students are taught to recognize the elementary processes of acquisition, the emotions aroused, the importance of interest, and the volitions resulting. The sources of knowledge, the stimuli of interest, the mental processes appropriate to the several subjects, and the conditions in general for right mental activity in each subject, are learned as individual facts.

In the observation and practice of teaching, effects of the teacher's knowledge of children, of subject, of fitness of mental process, of the influence of tact, of the possession of right habits are discerned.

During the last term of the course, the systematic study of man as an educable being is based upon the child study, the analysis of subjects, and the observation and practice of teaching previously described. The purpose of this course is to organize into attitude and habit, as thoroughly as possible, the following propositions.

The present characteristics of body and mind in men are evolutionary products.

Every child is the result of countless generations of developmental changes both in body and mind.

Growth includes fundamentally the repetition by body and mind of the essential features of race progress. The phases of life — infancy, early childhood, later childhood, adolescence, adult life, and old age — are racial metamorphic periods, necessarily with distinctive characteristics.

The reflexes, instincts, and forms of consciousness of childhood are noticeably hereditary habits or tendencies, and are relatively stable.

Individuality is partly inherited, partly acquired.

Environment includes the inherited and acquired characteristics of one's own body and mind, as well as the physical surroundings of outer life.

Education is possible and necessary because a child is born with relatively few organized habits.

Education is under the immediate control of others for nearly one-third of life because of the ever-increasing variety and complication of experiences necessary to obtain higher success in living.

Education never ceases, and should be intelligently adapted to the characteristic needs of each phase of life.

Professional preparation for teaching is coming into conscious intelligence, and correct habits of directing the inherited tendencies and habits of the learner, under the influences of improving environment, into the acquirement of ever-increasing power of truth, beauty, and goodness, expressed in human conduct.

Professional preparation is the organization into habits of thought and practice (1) of discriminating knowledge of the evolutionary progress of man, (2) of the present physiological functions, (3) of the present mental functions, (4) of the interdependence of body and mind, (5) of the conditions necessary for right activity of body and mind. The present physiological functions of man are studied under the topics Physiology and Zoölogy and are reviewed in this course. The present mental functions are consciously investigated by the systematic study of children and adults, individuals and groups; by introspection; and by the testimony of others. The conditions of right activity for learning and teaching are apprehended by studying the ways and means in which the needs of children are satisfied; by analysis, organization, and correlation of knowledge into conditions favorable to mental growth; by the application of principles during the practice of teaching.

Principles of psychology and pedagogy are apprehended and appreciated because of their guidance of thought processes, their productiveness of interest and certainty, their determination of method. The study of psychology and pedagogy is for the illumination and inspiration of teaching.

School Organization and Management

These subjects are studied in a manner very like that described above. Observation and induction are the major portion of the process. The training school serves as the model of a school for children, the normal school as one for youth.

History of Education

The aims of this course are: —

1 To discover the progress of educational theory and practice.

2 To discuss the aims, method, and result of each.

3 To discuss the meaning and value of principles of education as evolved.

4 To find one's need of gaining inspiration from others.

5 To stimulate the desire to know the practice of other individuals and nations.

6 To liberalize, — foster the creative rather than the imitative spirit.

In the conduct of this course each pupil is provided with a brief compendium of the history of education as a foundation for his work; and a departmental pedagogical library is provided for reference use. Each pupil outlines the assigned topic for oral or written recitation, and free criticism follows. Frequent assignments of special subjects for investigation and report are made. Whenever feasible, educational theories and practices are illustrated in the conduct of the regular recitation.

School Laws of Massachusetts

The purpose of this course is to make the students familiar with the principal powers, duties, and relations of teachers, pupils, and other parties directly concerned in school work as defined in the Revised Laws. To this end, brief consideration is given to law, — its relation to custom, as subsequent rather than precedent; its purpose, in defining and unifying practice; its kinds, — permissive, compulsory, and prohibitory. The more important laws are then analyzed; and the several powers and duties granted and forbidden to each of the parties finally summed up and classified.

Nature Study and Natural Science

In the work in the natural sciences there are sought constantly the knowledge, the interest, the training needed by those who are to teach nature study and related subjects in elementary schools. Hence the aim is to cause the prospective teacher to possess and to be able to cultivate in others "what may be termed the ele-

mentary equivalent of the genuine scientific spirit, so that out o his native fondness for things about him shall come an enthusi astic truth-seeking, reverent attitude toward nature," an apprecia tion of the beauty, harmony, and inviolability of nature's laws together with some mastery of the means for subduing nature' forces and utilizing them for his own protection and developmen and for the social good.

Mineralogy — Each student is assigned a place in the laboratory and is provided with apparatus and typical specimens (see "Equip ment," page 19).

He is taught to recognize and name a considerable number o minerals and rocks by practice in distinguishing their physica properties. A smaller number of the most common and usefu minerals, with their varieties and the rocks in which they occur are studied in greater detail. Special stress is laid upon such a can be found in the neighborhood of the school, and upon the use of mineral bodies for manufacturing, building, and decorative pur poses.

Students are led to see the value of such work in developing the power and the habit of close observation, critical comparison and nice discrimination; also in cultivating interest in commor things, and utilizing the collecting instinct of children for thei education.

A few chemical tests are taught, and other interesting correla tions made with the study of chemistry going on at the same time

Each student is assigned a topic for special research, the result of which are presented to the class. This gives training in the use of books and in the orderly arrangement of subject-matte for teaching purposes. Each is required to make a collection o minerals and rocks of the region, and to illustrate the assigned topic; and field excursions to several interesting localities are mad for this purpose.

Chemistry — The following are some of the topics considered nature of chemical change, oxygen, nitrogen, air, hydrogen, water the forms of carbon, carbon dioxid, coal, illuminating gas, com bustion and flame, foods, respiration, fermentation, manufacture of lime, iron and glass, acids, alkalies, salts. The metric system of weights and measures is used.

Each student prepares simple apparatus and performs experiments (see "Equipment," page 19), being guided to the proper interpretation of the observed results by printed questions and directions. Ability to use experiments in teaching is especially sought. Those who work faster or who have had the subject-matter before are given extra exercises, adapted to their ability, to present before the rest of the class.

The laboratory work is followed by class discussions, and notes on each experiment are written, which are expected to be in good form, correct in English, and to cover the following points: —

1 Purpose of the experiment (topic to be illustrated).

2 Apparatus (what we use).

3 Experiment (what we do).

4 Results or observations (what we learn by the senses).

5 Inferences and explanations (what we learn by thinking, reading, etc.).

6 Applications (what things in every-day life, in nature, in other studies, the experiment may be used to teach or illustrate).

In addition to the individual laboratory work, students perform assigned experiments before the class, and question their classmates about the results and their explanations. They also conduct experimental work in the practice school.

Special attention is given to the applications of experiments in explaining the facts of common life, or of other studies, such as mineralogy, human physiology, and nature study. Visits are made to the gas works, a lime kiln, and an iron foundry.

Physics — From the view point of interest and daily experience, the subject is introduced by observational study of the machinery, tools, and utensils of the various mechanical departments. The following apparatus is studied in considerable detail: boilers (high and low pressure), gauges, thermometers, radiators, flues, valves, packing, weigh-scales, steam engine, fans, steam kettles, steam traps, pumps, water heaters, water supply, plumbing; gymnasium apparatus, elevator; electric wiring, dynamo, projection lantern, transformers, lighting apparatus, batteries, bells, clocks, telephones, gas pipes, meters, burners, etc.

From the view point of the subject, those portions are selected which, it is thought, will be most useful to teachers in elementary

schools, such as: pressure in water and air, with applications to city water systems, artesian wells, hydraulic press, specific gravity methods, barometer, pumps, siphon, breathing, etc., nature, properties, and states of matter; simple machines, and the conservation of energy; heat, and its manifold applications, magnetism, and electricity.

The school is well supplied with apparatus; but special pains is taken to teach students to improvise, from such materials as may be gotten anywhere, inexpensive apparatus, which they may take into the schools to illustrate the simpler facts of physics, physical geography, and human physiology.

The work is chiefly qualitative, but, wherever possible, computations based upon measurements made in the experimental work are the means of correlating physics and mathematics and of securing greater power in both.

Drawings or diagrams are required when they can be made to aid in the expression of conditions and results.

Botany — Plant-growing is the most significant feature of the course, that life as growth may be understood, enjoyed, and made the end of learning and teaching. By the actual daily process of growing plants, they come to be not simply intelligible, but beautiful, wonderful, and useful.

In the autumn bulbs of many kinds are planted by each student, and covered properly until roots are well grown. In due season they are removed to the various rooms of the school buildings and dormitory, and enjoyed from day to day. Interest in appearance, leafing out, budding, and flowering is as great as the feeling of beauty; and the fundamental sympathetic attitude toward nature knowledge and nature teaching is thus secured.

In midwinter definite instruction begins. Hyacinths, tulips, crocuses, and all the rest are studied, to ascertain their mode and condition of growth. Structure and function are learned incidentally, but none the less efficiently. Twigs and winter buds of trees and shrubs are put in water, and their development watched and compared with that of bulbs.

Geraniums or similar plants are now grown. They, too, have been watched and enjoyed incidentally through the preceding months. Green wood cuttings are made by each student and

rooted in water or various soils. Young plants are potted, cultivated, pruned, and finally set out in the gardens. An extended knowledge of structure and function, of adaptation to environment, are secondary but permanent results.

Seeds of many annual herbaceous plants are now planted in shallow boxes filled with various soils. Young plants are thinned out, transplanted, some potted in tins or cheap paper pots, and finally set out in the gardens. This experience leads directly to gardening. To knowledge and enjoyment of plants are added interest and intelligence as to soils and the processes preparatory to planting. Simple experiments are performed by members of the class, to show how plants live and grow, and to illustrate the fundamental principles upon which successful plant-rearing depends.

With the opening of spring a tract of land is plowed and harrowed, a section is assigned to each student, who then does all the work of making and caring for her garden. Flowers and vegetables are grown. Appropriate records are kept. Botanical instruction arises from the processes of growing plants.

Due correlation with other sciences, with drawing, and with arithmetic, are made as the incidents of the work occur.

Assisting in the children's gardens follows as a matter of course, with the last and best of results, — the knowledge and ability to have window or out-door gardens in the schools to which students go.

Zoölogy — A series of typical animals is so studied as to make out their plans of structure and the adaptation of their structure to habits and surroundings. Related forms are compared with these, and some idea of classification is developed. Each student examines both live and preserved specimens, furnished by the school or collected by himself, being guided by definite directions and questions for thought. The facts observed are expressed by labelled drawings and by written statements.

The use that may be made of the material in giving animal lessons in elementary schools is constantly kept in mind. Hence such forms as are easily obtained in the interior are selected, and very little dissecting or microscopic work is required.

The work begins in the fall, with the study of insects, such as

locusts and crickets, dragon flies, house flies, butterflies and moths, honey bees and wasps. Their life history is traced by means of a series of imported preparations, showing all stages from egg to adult (see "Equipment"), and also, as far as possible, by means of live specimens. Out-door trips are made for observing and collecting.

Other animals studied are the lobster, the spider, the centipede, the millipede, the earthworm, the fish, the frog and its development, common birds, and mammals. Special attention is given to domestic animals.

Special topics are assigned for library work, lesson plans are prepared, and teaching exercises conducted.

Physiology — The course includes so much of anatomy as will make vivid the harmony between structure and function, so much of physiology as will emphasize the fundamental importance of the vital functions, and so much of personal hygiene as should be practised by one knowing his body as a physical organism, the abode and instrument of his mind, and respectful of it because of its possibilities in use, strength, and beauty.

The range of the subject is: The human body as a whole; its external and structural parts; general plan of the body; the general structure of the limbs and walls and the different systems of the body, — digestive, absorbent, circulatory, respiratory, secretory, excretory, osseous, muscular, and nervous; their functions; the conditions of health. School hygiene, sanitation, and emergency lessons receive proportional consideration, our own environment furnishing ample and proper illustrations. The kind of work is distinctly objective and practical.

Gymnastics — Health of the individual is the chief and constant consideration. Physical culture is induced by seeking to obtain ideals of physical vigor, co-ordination, and grace, by means of volitional, formal exercises, and spontaneous games, and the habit of physical expression of noble ideals. The Swedish system of gymnastics is taken as the basis. Adaptations to needs and interests of children, youth, and adults are impressed vividly.

Instruction in the theory of gymnastics is correlated closely with the study of the human body, as indicated under physiology. The physiological basis causes the importance of gymnastics as a need of personal health and as a feature of public school education to be acknowledged heartily, and leads to zealous action.

dents in the normal schools
unimpaired throughout their course, and
that the graduates may be prepared to care
for the physical culture of pupils in their
own schools, the Board has voted that at
least two hours a week of class work in
physical training be required of all stu-
dents in the normal schools throughout
their course.

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The gymnasiums are well ventilated and lighted, fully equipped, and conveniently adapted for formal exercises, games, and athletics.

Geography and History

The courses in geography and history are correlated to harmonize with the nature of the child. Three stages of development recognized may be designated the experiential, informational, and rational.

During the first stage (early grades) there is to the child little or no distinction between geography and history as such. The child eagerly seeks all forms of experience in and with his environment. He watches and imitates those about him, and thus learns through his own experience; he listens to tales of the deeds of others remote in time or in space, and these he tests by imitation and invention.

In the second stage (middle grades) the child is pre-eminently an ardent explorer. He roams more widely over the streets of his city or the fields of his country home, — to extend his material, industrial, and social environment. Beyond the limits of what he can actually visit he roams with the traveler, seeing other and stranger parts of the world; or with the story-teller and historian to other times, — in his own home and elsewhere. When he reads of the explorers and settlers, he sees new lands with them and gets new information about this old earth; or he follows their deeds and conquests, delighting in their biographies. When he reads of social or industrial leaders or inventors, he lives with them in their social environment, enjoying the geography of earlier times; or he compares past life with present, and traces historical growth. He gathers the most of this information through the use of books, pictures, maps, and other symbols. Through these middle grades information widens rapidly; books and maps become prominent; knowledge begins to be organized and distinguished as geography and history. Yet the interest and the kind of study are essentially identical.

The third stage of rational geography and history (later grades) makes use of causal reasoning, and leads to appreciation of the close mutual relationship of these subjects. Such causal relationships are the interaction and interdependence of geographical objects, — inanimate, animate, and human. In geography we at-

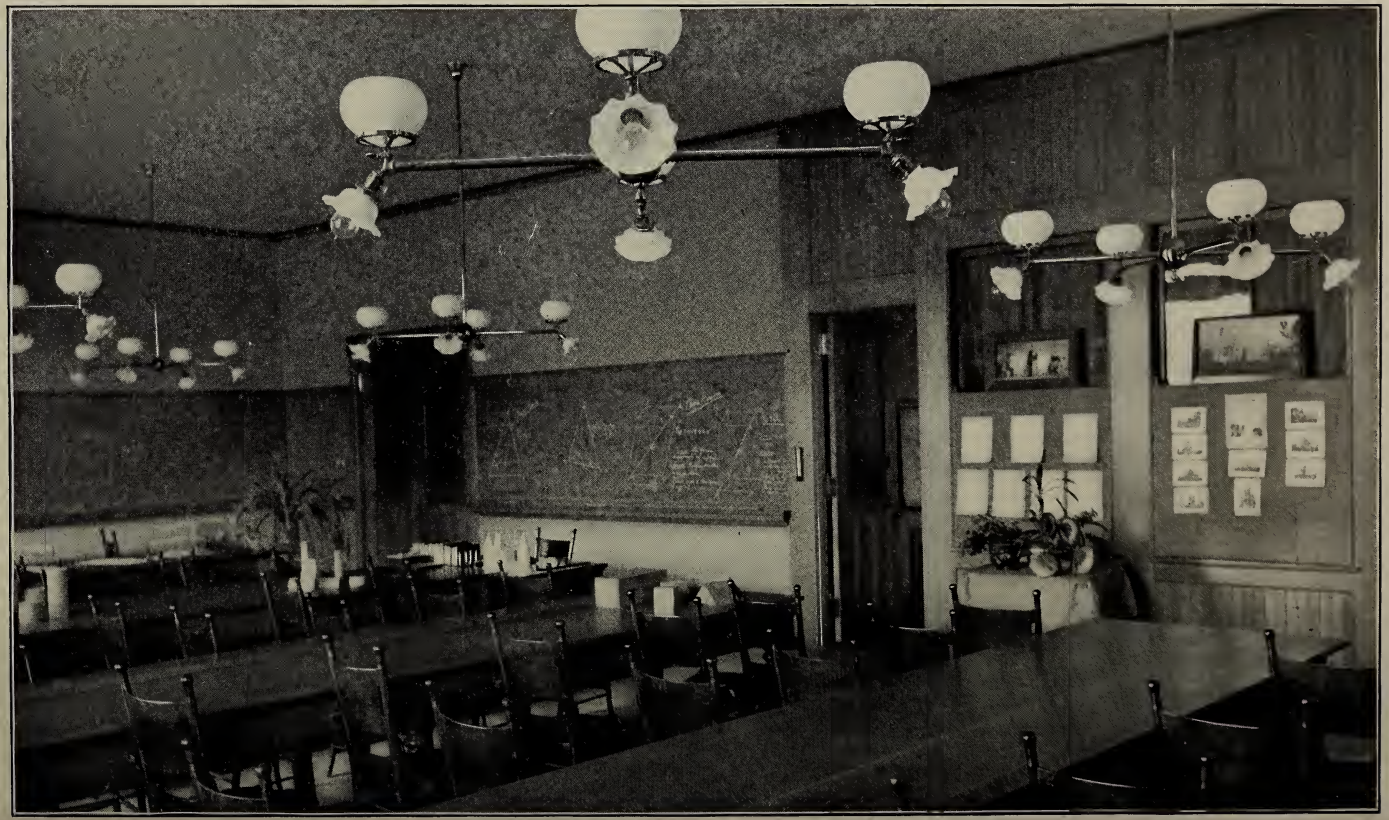
tend, for example, to the effects of rotation and revolution of the earth in zones of light and belts of heat, winds, rainfall, and vegetative regions upon man's life; and, as well, to man's reaction upon his environment. The development of economic life, whereby man changes from his immediate to his adjusted dependence upon his environment, the development of social and political customs, of government, religion, nationality, and world influence, are also causal. They are important elements in history. All mentioned are factors needed to understand present-day geography.

Such principles are applied in geography in the careful study of continents. The effects of configuration, surface, climate, etc., on man and of man upon them are found; this leads to the peculiar usefulness and opportunity of each. It is natural then to turn to the thought of the nations most prominent to-day. From the land in which each nation developed to the regions which it developed in turn or now controls, one is led directly to the nation's relation to other nations, to its proportion of influence in world development, to the interdependence of nations, and the progress toward world unity.

In history the thought is more fully expanded, since confined to a much more restricted environment — that of the United States — with more attention to details of the process of development. More emphasis is laid upon the industrial, social, and moral relations of man with man. Our history is a progressive development in an expanding environment, with increasing world influence and importance in economic, social, and political lines.

The latter part of the grammar school work should look more distinctly to citizenship (political responsibility) through the study of civics, and to business responsibility through consideration of the world supply and distribution of commercial articles.

The work of the normal department is to find these phases of development, and to see how the subject-matter may be used to meet the needs of children. In the training department specific application is made in the teaching of children. For the sake of fuller knowledge and for illustration of the way of study and of teaching, specific instruction in rational geography and history is necessary; particularly in the relation of our own national contribution to the world problem of government, through the development of English representative institutions.



MATHEMATICS

Mathematics

Geometry — The scope of the work is: (1) geometric magnitudes, illustrated by models; (2) relations, measurements, drawings, descriptions, definitions; (3) study of plane figures and discovery of theorems; (4) study of solids, discovery of theorems, measurements (according to time); (5) objective and mathematical demonstration; (6) occurrence of geometric forms in nature and architecture; (7) conception of the geometric magnitudes as real, non-material, accompanying all preceding steps.

Algebra — The scope of the work is: (1) generalizations leading to laws of number, as exemplified in six fundamental processes, — addition and subtraction, multiplication and division, involution and evolution; (2) use of axioms in solving of equations, simple and quadratic; (3) deducing of formulas, their interpretation and application, as in factoring, transformation of fractions, binomial theorem, etc.

Arithmetic — The scope of the work is: (1) number, as applied to measured quantity, as length, area, volume, capacity, weight, money values, time, etc.; (2) consideration of objects adapted to number teaching; (3) drawing, cutting, building, to find and illustrate values in relation to unit of quantities, in relation to each other; (4) six fundamental processes (see algebra), laws of number as used in each; (5) application of processes in mensuration, proportion, forms of percentage, etc.; (6) applications to actual conditions of life, — industrial, commercial, governmental, social.

English

The general aim of the work in the department of English is so to acquaint the student with the many forms of English expression as to impress him with the importance of the teaching of English. Study of the student's personal experience in learning and that of children in the grades is made the basis of all study of methods. The course comprises language, grammar, composition, literature, and reading. The subjects are correlated as much as possible.

Language — The order of teaching is: (1) the significance of language; (2) what it includes; (3) the various means by which the language power and knowledge of the child are increased in

the lower grades; (4) the methods and values of the forms of teaching, together with devices. Stress is laid upon story-telling, the use of pictures, letter-writing and the principles of composition. Constant practice by the student in the doing and teaching of these things is required.

Grammar — The study of scientific grammar is pursued for its disciplinary value to the student, — for the purpose of training the mind into thinking abstract relations. The discovery of a logical order in the teaching is made, and from the knowledge thus gained elementary grammar is directly derived by the student.

Composition — The aim in this work is to lead the student to appreciate worthy diction and style, as exemplified in our masters of English; to recognize, through the analysis of various pieces of literature, the essential elements of good composition; and to apply this knowledge to improve his own writing and speech.

The study comprises: (1) the composition as a whole; unity of material and of aim, unity of the paragraph, proportion of parts, simplicity of structure, sequence, and movement of thought, transitions, introduction, and conclusion; (2) the paragraph: factors and modes of development; (3) the sentence: conciseness, combination of related parts, punctuation, variety, choice of words, euphony, emphasis, period, climax, balance.

Literature — The value of literature as one of the most important factors in spiritual education is emphasized. Sympathetic and appreciative rather than critical study is made of various literary productions. The aim in this course is to inculcate a desire for reading, to cultivate a taste for good literature, to uplift by giving fresh inspiration and new ideals of life. The method is reading and studying of the best things that have been written, rather than studying *about* literature and authors. The history of literature and the biography of authors are studied in so far as will aid in accomplishing the purpose of the course.

Lists of poetry, fiction, and essays are presented to the student, from which he selects a required number. The reading is carried on and reports are made to the class according to definite outlines.

Some of the masterpieces of English literature are read not only for the culture thus afforded, but for the purpose of comparing the past with the present in matter and technique; of find-

ing out how much of the material of the past is used to-day and under what modifications; of fixing standards of judgment based upon wide reading.

Reading — The aim in this course is to give the students a knowledge of the principles that underlie the art of expression, and to develop the power to use these principles in their work.

Vocal expression is the co-ordination of mind, voice, and body in the utterance of thought and feeling, hence the training is in these directions.

Mind training — Clear thinking is the first condition of clear expression. Various selections are studied to develop the ability to think clearly the ideas and their sequence as expressed in the text. To this end narrative, descriptive and conversational prose, and lyric and dramatic poetry are studied progressively. Especial emphasis is laid on story-telling and extemporaneous speaking as means of developing in the students the power to express what they have to say simply, directly, and naturally. Myths, legends, folk-lore tales, and numerous other stories, suitable for use in teaching the various branches in the different grades, are prepared and the best means of presenting are discussed.

Voice training — Exercises are given to free the voice from limitations and acquired faults, to bring out its latent strength and purity, and put it in such a condition that it may adequately meet the demands made upon it in teaching and speaking.

Body training — Only as much of this work is given as will enable the students to bear themselves well before their schools or audiences.

Drawing

The purpose of our art study is to consider the principles governing good art, to study and enjoy examples of art embodying these principles, to give an appreciation of harmonious coloring, and to feel the connection existing between the arts, music, literature, and painting, realizing that all are governed by the same general principles. Students should be alive to see and enjoy whatever is beautiful in the world about them, and in their own work to realize that "art is simply doing whatever one has to do in the best possible way."

The class work is grouped under the following heads: Appear-

ance, — perspective elements, pictorial drawing (single objects, grouping and composition). Structure, — elements of form, elements of beauty, structural design. Enrichment, — color, elements of ornament, decorative design.

An abbreviated course in the history of art is carried on, parallel with these subjects, and the pupils are encouraged to collect reproductions of the world's best examples of architecture, ornament, sculpture, and painting.

The pupils use the following mediums of expression: water-color, pencil, charcoal, and blackboard crayon. Blackboard illustrative work from memory along all lines of work studied is an important feature of the course.

Music

Tone perception: listening to voice and piano; scale tones and exercises by imitation; writing from oral dictation.

Tone production: securing softness, sweetness, purity of tone; developing appreciation of beauty of tone; study of child voice.

Sight reading: daily practice in music; thinking, silent, and oral reading.

Analysis of form: developing understanding and appreciation of musical form; most important forms analyzed; illustration by voice and piano; application in appropriate phrasing, etc., in oral work.

Melody: laws illustrated; study of melodies from the symphonies, sonatas, oratorios, operas, and from the best songs; writing of original melodies; study of children's songs, with reference to selection for school use.

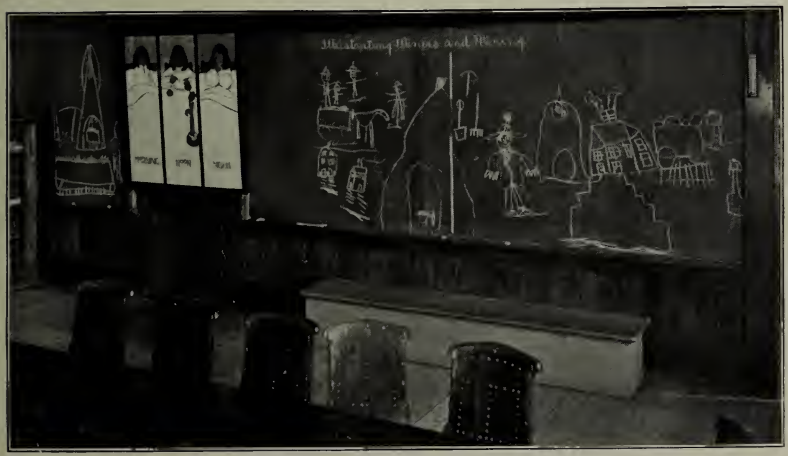
History: lives of eminent composers; illustrations, vocal and instrumental, to gain familiarity with types and cultivate taste for music.

Interpretation: piano playing for pupils once a week in normal school and training school; explanations of graded selections illustrating rhythm, melody, harmony, form, and adaptation to expression of emotion.

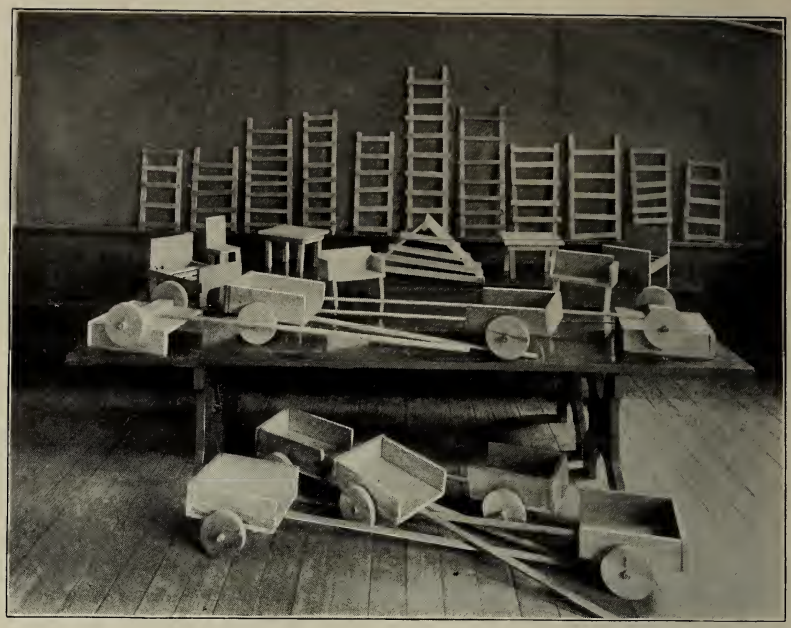
Chorus work: practice twice a week in chorus reading; a musical program given at Christmas and Easter.

Glee club: practice twice a week; one concert given in the year; singing for pupils in the training school.

KINDERGARTEN — COAL MINING



THREE CHILDREN'S DRAWINGS



KINDERGARTEN — WOODWORKING

HARVESTING

Piano music and practice: The collection includes works by eminent composers, graded and progressing in difficulty to Beethoven's sonatas and Bach's fugues. A duplicate collection is in use in the training school, and a smaller collection is in the music room of Taconic Hall. Three pianos are available for students' practice.

Industrial Training

The aims of industrial training are as follows: —

Satisfaction of the impulse to do.

Enjoyment of the product and of merited approval.

Testing of ideas to prove their correctness and worth, to measure presumed ability.

Stimulation of inventiveness.

Understanding by participation in occupations characteristic of the home.

Cultivation of responsibility and conscience.

Comprehension of the meaning and worth of labor.

Recognition of industrial work as applied science and applied art.

Valuation of labor.

Consciousness of personal ambition and ability.

Choice of a vocation.

Pursuance of the processes of a vocation until fitted for independent activity.

Attainment of that attitude toward wisdom which comes from widening personal experience.

Many of these aims remain subconscious elements of understanding and motive, but they are none the less active and powerful. The industrial work for the children and the students is organized to realize these aims, and does so with a high degree of success.

The kinds of work undertaken are modeling in clay; weaving with sticks, paper, threads, and raffia; basketry; cardboard and paper construction; whittling and carpentering; bent iron work; hammering and cutting copper; printing; sewing, and embroidery to some extent.

The problems increase in difficulty as the individual gains in ability, the purpose throughout being, so far as circumstances permit, to suit the work to the needs of the individual. Relative diffi-

culty and interest are considered important factors. The normal students follow, as far as time permits, the line of work indicated for the training school, the object of the work not being to prepare teachers of manual training, nor to furnish an adequate course for individuals in whose previous education hand training has not played an important part, but rather to demonstrate the value, and lead students to appreciate the importance, of handwork as an active factor in early education, and to prepare certain pieces of apparatus for teaching purposes.

TRAINING SCHOOL

On an adjacent lot is a modern brick building, containing twenty class rooms, an assembly hall, two large basements, playrooms, a woodworking room for the kindergarten and first primary grades, the motor and boiler rooms. In an annex is the gymnasium, forty by seventy-two feet, supplied with Swedish apparatus sufficient for the accommodation of classes of forty pupils each. All grades are represented, beginning with the kindergarten and extending through nine years of primary and grammar work to the high school. There are eighteen rooms, and in each room is a regular teacher in charge of a class not exceeding forty pupils. The principal is free for the direct observation and instruction of the normal students.

Unusual opportunities are afforded for the study of children and the practice of teaching. Students begin their work in this department immediately upon their entrance into the normal school, and continue it regularly throughout the course. The rapidity of progress through the various stages of the training school work depends on the ability and previous experience of the student. Definite oral instruction and printed schedules guide the observation of children individually, in groups, in classes, and the observation of teaching and control. In general the order of work is as follows: —

First Year — First term: observation of individual children and of groups begun. Second term: observation of the class

GYMNASIUM

TRAINING SCHOOL (MARK HOPKINS SCHOOL)

KINDERGARTEN — PRIMARY COURSES

for prevailing and peculiar qualities; observation of teaching and control emphasized.

Second Year — Third term: study of school organization and management, and assisting in teaching and management. Fourth term: practice in teaching, the amount of responsibility conferred depending on the ability of the student.

Third Year — Responsible charge of classes, elective work. Students who have taught successfully before entering are given opportunities for practice in teaching and disciplining as early in the course as their abilities warrant.

Close and appropriate supervision and instruction are given students by the regular teachers of the several grades and by the principals of the various departments, thus insuring reasonable progress to students requiring extra opportunities in the practice work of teaching.

Equipment

The training school is bountifully supplied with the means of instruction, and the resources of the normal department are always available for daily use. Class libraries are located in each room, thus stimulating pupils to swift and sure lessons in order to get time to read in school, and encouraging them to discriminate as to home reading.

The *kindergarten department* occupies a suite of three sunny rooms which can be opened into one. The equipment is worthy of special mention. Froebel's spirit and principles are followed rather than the letter.

Toys — The collection is large and represents all the industries requiring the use of animals, conveyances, household apparatus, tools, means of production, and other forms of social life. The toys are used in free play before the opening of the session, and in guided play as occurring in the program.

Sand-table — This is an important factor in representing the conditions of industrial life. The work, whether free or guided, is distinctly constructive, collective, and increasingly co-operative,

and affords the sympathy, help, and inspiration which only work with other children can give.

Enlarged material — The building gifts are in three sizes — one inch, one and one-half inches, and two inches. The children because of their greater dexterity and larger products with the enlarged material discarded the one inch material, and that is found of real value in the early primary grades. The one and one-half inch size is used for table work, the two inch material for building on the floor. Similarly, enlarged sticks, tablets, peg boards, and folding paper, etc., are in use.

Weaving — For reasons mentioned above, children do most weaving on large wooden frames, with cloth or worsted. Some very simple work is done with raffia.

Woodworking — In a corner of the basement a small workshop has been established. Small saws, hammers, and screw drivers are used in making ladders, bed frames, carts, tables, coops, etc. Children also stain the articles made.

Gardening — A large plot of ground is arranged in beds, planted, and cared for by the children. Flowers and vegetables are gathered in season and used for satisfying friendship and interpretation of life.

Cooking — The vegetables grown in the garden are cooked in the school-room, corn is popped for food and decoration, maple syrup is boiled to sugar or wax, etc., — and all to give glimpses into the meaning of life and to cultivate the simple, vital virtues.

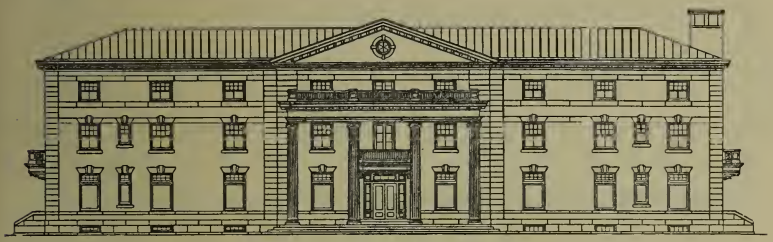
Rhythm — Special effort is made to stimulate the perception and expression of rhythm. Conversation, prose, poetry, music, pictures, and design are all used at appropriate times. Music is chiefly used; the children enjoy it most, respond to it most readily, obeying its changes promptly without aid of words from the leader. Natural movements, such as walking, hopping, running, skipping, jumping, sliding, skating, etc., are performed with their natural rhythm, with and without music, resulting in marked freedom and control of bodily action. Rhythmic games, imitations of children's plays and of animal movements are constantly used in teaching obedience, self-control, co-ordination, and concentration.

TACONIC HALL

SOCIAL ROOM READING ROOM

TACONIC HALL

The material of the dormitory is yellow brick and white marble, thus carrying out the color scheme. The building is 156 feet long and 100 feet wide, the courtyard being about 58x70 feet. On account of the slope of the land the basement floor is at grade with the courtyard, thus securing dry and

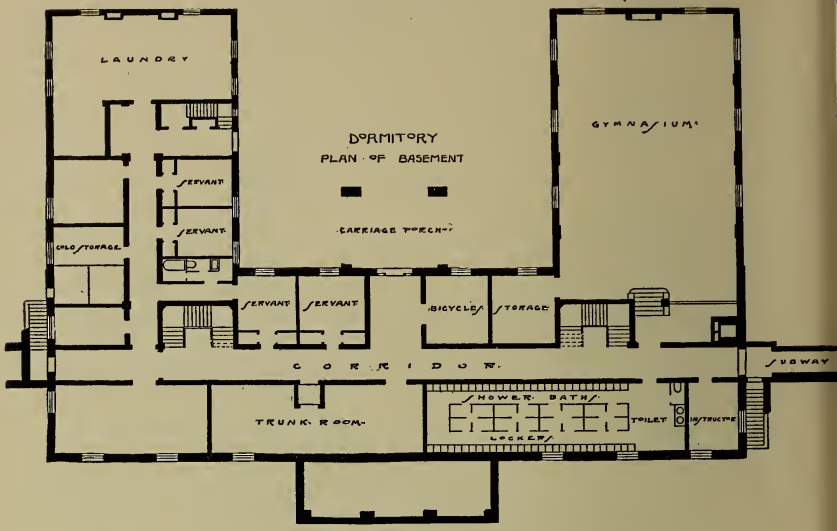


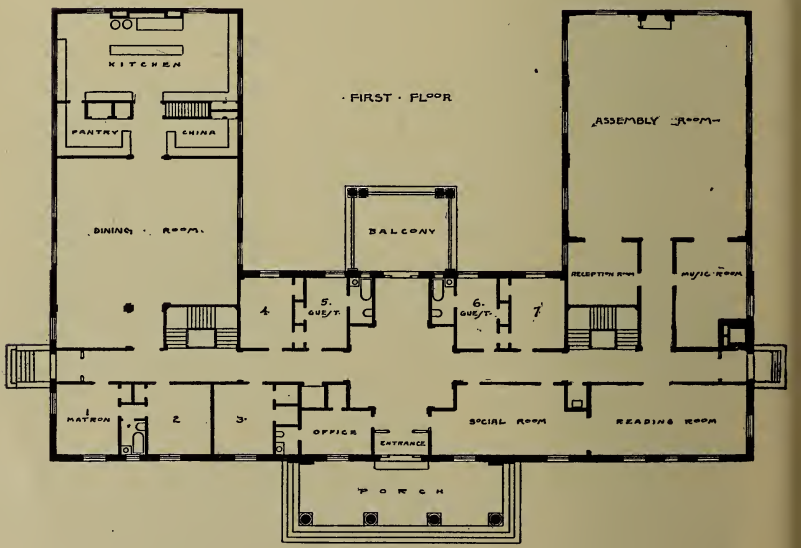
EAST-ELEVATION.

light living rooms and making the wings as seen from the courtyard three stories high. The balcony over the east porch is available for persons living on the third floor, and the two west balconies accommodate those living on the first and second floors. Two guest rooms (5, 6) are provided for parents and friends. Two hospital rooms (41, 43), with suitable furniture and intervening bath room, are on the third floor. The building is heated by steam and lighted by electricity. A subway connects the dormitory and the school building, affording easy access to the gymnasium and protection during inclement weather.

Unusual facilities are provided for cultivating a homelike and beautiful social life. The rooms of the first floor afford opportunities for all forms of mental enjoyment, and the gymnasium in the basement is convenient for daily evening physical play, just before retiring.

Two students occupy one room. Each room is supplied with chairs, study-table, book-case, bureau, commode, screen, two


LAUNDRY
DORMITORY
PLAN OF BASEMENT
GYMNASIUM
SERVANT
SERVANT
CARRIAGE PORCH
COLD STORAGE
SERVANT
SERVANT
BICYCLES
STORAGE
CORRIDOR
SUBWAY
TRUNK ROOM
SHOWER BATH
LOCKERS
TOILET
INSTRUCTOR


KITCHEN
FIRST FLOOR
ASSEMBLY ROOM
PANTRY
CHINA
DINING ROOM
BALCONY
RECEPTION ROOM
MUSIC ROOM
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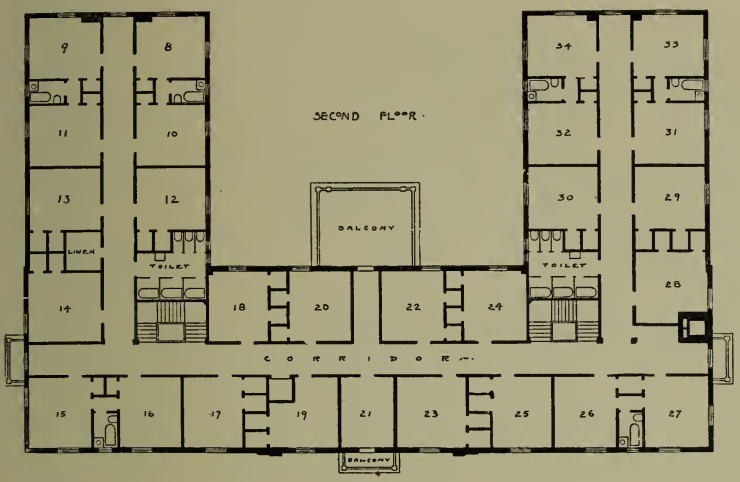
5. GUEST
6. GUEST
7
MATRON
1
2
3
OFFICE
ENTRANCE
SOCIAL ROOM
READING ROOM
PORCH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BALCONY
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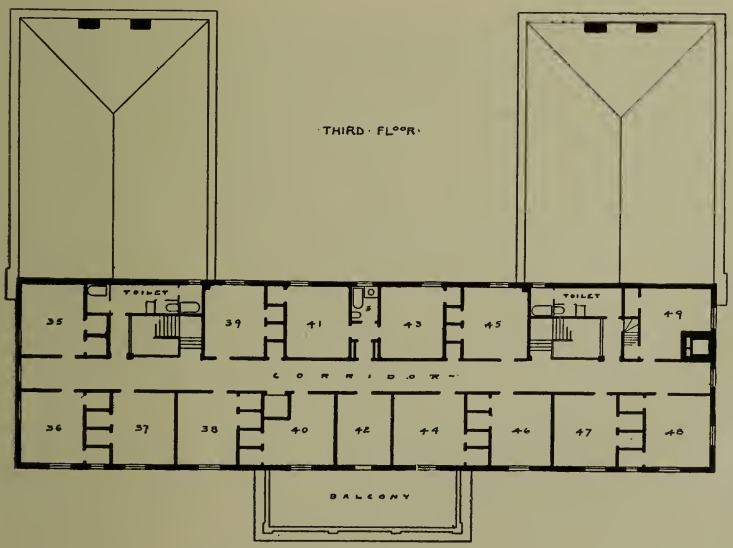
THIRD FLOOR
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TOILET
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couches (three feet wide), mattresses, pillows, coverlets, and rugs. Each boarder brings bedding, towels, napkins, napkin ring, and two clothes bags.

All articles sent to the laundry must be distinctly and indelibly marked with the owner's name. *Initials will not answer.* Trunks also must be marked so as to be easily identified.

Rooms are assigned to entering students according to priority of application, preference being given to residents of Massachusetts.

EXPENSES

Tuition is free to all residents of Massachusetts. "Each pupil from another state than Massachusetts attending a normal school supported by this state shall pay to the principal of the school attended, at the beginning of each half-year session, the sum of twenty-five dollars for the use of the school."

Text-books and supplies are free, as in the public schools.

State Aid, not exceeding one dollar and one-half per week, may be granted to deserving persons after they have been in attendance for at least one term, provided they are residents of Massachusetts, and do not live in towns where the normal schools are situated.

Board — The regulations of the Board of Education require that the boarders shall pay the current expenses, which include table board, heating, lighting, laundry, and service. The price of board in each of the boarding halls connected with the normal schools of the State is $160 for the school year, payable in advance, in four payments, one every ten weeks, beginning with the opening of school in September.

The object of this payment in advance is to secure the purchase of supplies at wholesale cash prices, thereby lessening the cost of supplies and saving to each boarder much more than the interest of the money advanced.

Under these rates boarders are allowed to remain at the hall during the Thanksgiving recess without extra charge. Students whose homes are at a distance may, on permission of the

MUSIC READING RECEPTION

ASSEMBLY HALL

principal, remain at the hall during other vacations, except the long one in the summer, on payment of the additional sums for such vacations. The hall is closed during the summer.

When pupils leave the school before the expiration of a term, money paid in advance will be refunded pro rata. No deduction is made for absence from the hall of less than one week.

If there are vacant rooms, those who wish to room alone may do so, on payment of the additional charge of fifty cents per week.

Employment — Capable and reliable students can reduce their expenses by assisting in the household work, for example, by waiting on table, washing silver and glass, etc. Efficiency, need, and priority of application control the appointments. The amounts thus earned vary from $0.75 to $1.50 per week.

STUDENTS

Senior Class

Celia Anna Andrew	North Adams
Gertrude Johanna Arnold	Holyoke
Alice Gilmore Barrett	Adams
Frances Judd Brainerd	Monson
Frances Barr Buntin	Pittsfield
Mabelle Narrilla Chadwick	Adams
Harriet Statyra Crafts	Ashfield
Marion Alice Crafts	Ashfield
Eleanor Marie Cowlin	Dalton
Caroline Lillian Cushman	Pittsfield
Alice Bertha Dalton	North Adams
Elizabeth Cecilia Feeley	Lenox
Edith Green *	North Adams
Rosa Belle Hall	Buckland
Ruby Marion Hemenway	North Leverett
Mildred Hines	Berkshire
Hope Hotchkiss *	Shelburne Falls
Inez Belle Ingraham	Adams
Catherine Margaret Kelly	Lenox
Hope Willoughby Kelsey	Alford (Gt. Barrington, R.F.D. No. 1)
Lucy Belle Kemp *	North Adams
Katharyn Alice Mosher	North Adams
Florence Eleanor Nash	Greenfield
Mary Loretta Norton†	Lee
Ethel May Plumb *	Greenfield
Florence Maria Reed	North Adams
Susie Belle Temple	North Adams
Margaret Annie Tumpane	Adams
Mary Louise Welch *	Holyoke
Edna Frances Wood	Adams

Senior Kindergarten Class

Eliza Scoville Andrews *	Sheffield
Grace Marion Margaret Beaton	East Rochester (West Wareham)
Jennie Minerva Bushnell *	Sheffield
Adella May Endress	Bennington, Vt.
Clara Irene Parkhurst	North Adams
Grace Emaline Thickins *	Pittsfield

* Graduated February, 1907. † Graduated November, 1906.

Junior Class

Ella Rose Callahan	Cheshire
Helen Mary Carney	Philmont, N. Y.
Ethel Marion Beer	North Adams
Flora June Bowen	Clarksburg (North Adams, R.F.D. No. 1)
Margaret Boyd	North Adams
Agnes Adell Cheever	North Adams
Catherine Margaret Cooney	North Adams
Margaret Mary Dillon	Pittsfield
Mary Elizabeth Donica	North Adams
Evlyn Haskell Emmott	Concord
Mabel Elizabeth Fillio	Dalton
Jessie Foster	Stamford, Vt.
Belle Galusha	Williamstown
Emma Etta Gibbs	Williamstown
Ellen Elizabeth Hamer	North Adams
Anna Gertrude Hannigan	Monson
Pansy Sarah Hull	Williamstown
Ruth Melgrove Hutchinson	Pittsfield
Ethel Louise Kane	Great Barrington (Housatonic)
Cecilia Frances Kelly	Richmond
Mary Ellen Manix	South Deerfield
Mae Elizabeth McGowan	Chester
Esther Anna Nelson	Chester
Lena May Noble	Pittsfield
Anastasia Lillian Power	Lenox
Mary Ellen Purcell	Greenfield
Florence Winifred Raguse	Shelburne Falls
Grace Vincent Rowland	Shelburne Falls
Margaret Baker Sears	West Hawley
Laura Susan Stearns	Pittsfield
Lou G. Stevens	Williamstown
Winona Atkinson Weber	North Adams
Mattie Havilla Wiley	Buckland

Junior Kindergarten Class

Margaret Dale	Pittsfield
Marion Emily Feeley	Pittsfield
Elizabeth Susan Fisher	Hartford, Conn.
Kathryn Elizabeth Petty	Bellows Falls, Vt.

Special Students

Dorothy Burr (Vassar College)	Williamstown
Nella Hannah Cole	East Arlington, Vt.
Amy Turner Loom	Monterey
Mae Pollard	Northampton
Mary Etta Richards	Wilmot, N. H.

Vacation Students

Grace Florinda Abercrombie	Windsor
Maud Everlyn Allard	Turner's Falls
Alice Susie Ames	Lock's Village
Susan May Ballard	Charlemont
Marion Corinth Bates	Huntington
Faye Alice Beard	Brookfield, Vt.
Florence Aldine Berry	New Salem
Lila Mae Bliss	North Brookfield
Ida Kinney Bradshaw	East Templeton
Fred E. Cargill	South Royalston
Ella Florilla Carpenter	Shelburne Falls
Katherine Louise Dempsey	Lincoln
Bridget Amelia Driscoll	Windsor
Harriet Symmes French	East Templeton
Mary F. Lowd	Greenland, N. H.
Ruth Adella Lyman	Huntington
Mona Laura Pelton	Lenox
Ellen Josephine Temple	East Charlemont

Summary

Kindergarten class		10
Senior	6	
Junior	4	
Regular course		68
Senior	30	
Junior	33	
Special course	5	
Vacation students		18
		96

Certificate Required for Admission to a Preliminary Examination.

_____ 1907.

_____ has been a pupil in the

_____ School for three years, and is, in my judgment, prepared to pass the normal school preliminary examination in the following group, or groups, of subjects and the divisions thereof: —

Group II. _____ Group IV. _____

Group III. _____ Group V. _____

Signature of principal or teacher, _____

Address, _____

Certificate of Graduation and Good Character.

This is to Certify that M_____

is a regular graduate of a four years' course of the _____

_____ High School, and that, to the best of my knowledge and belief, _____ he is a person of good moral character.

_____ *Principal.*

_____ 1907.

UNIVERSITY OF ILLINOIS-URBANA
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